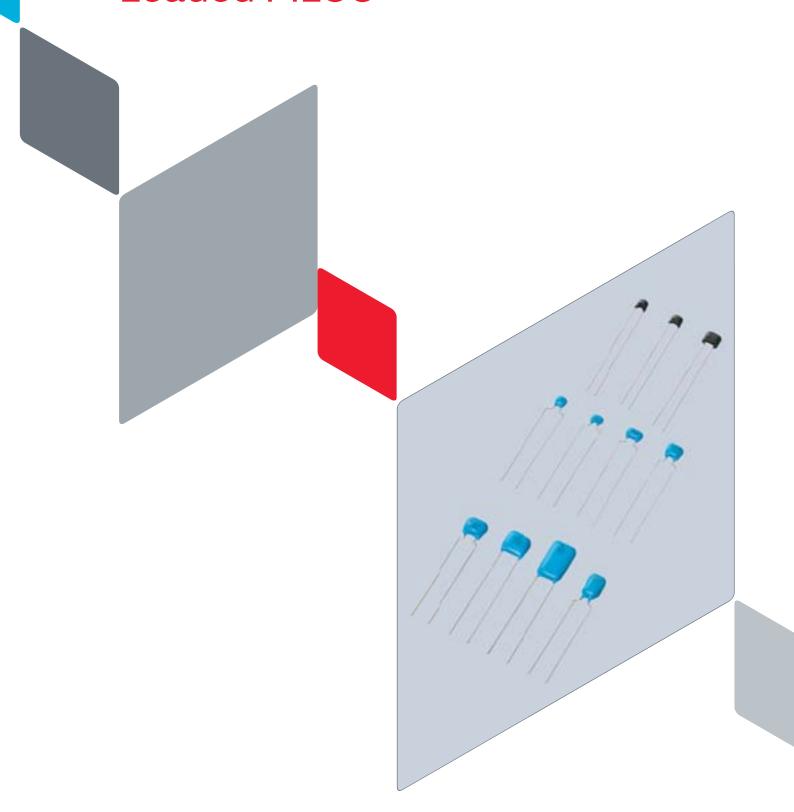
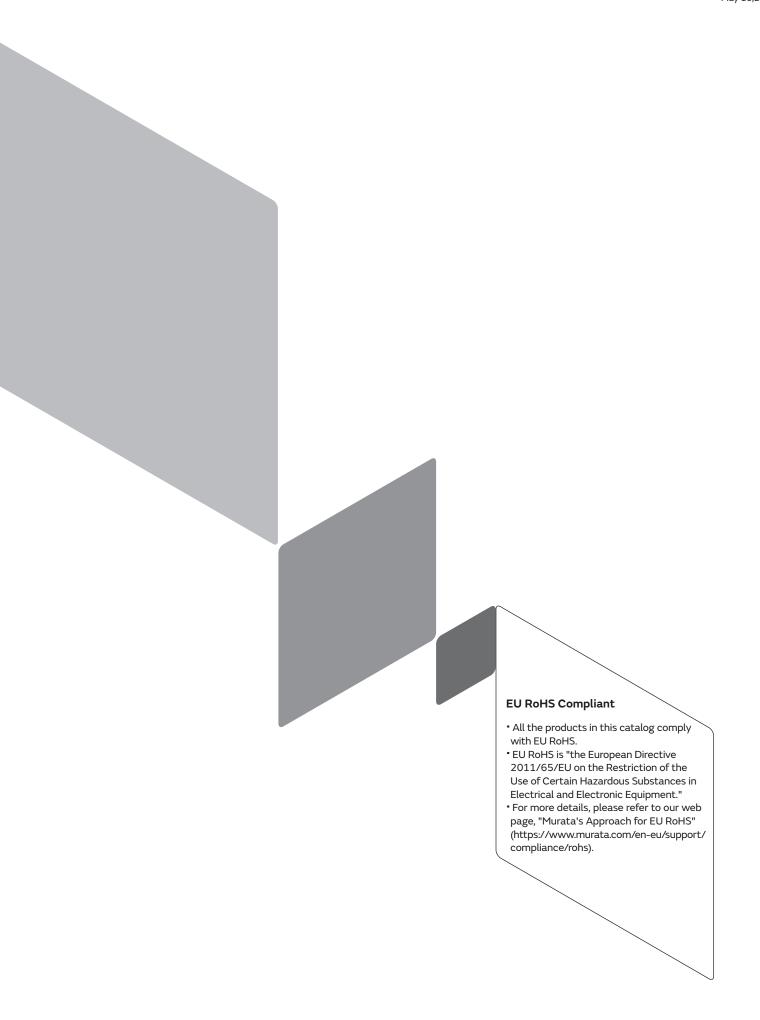


# Leaded MLCC





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Product specifications are as of February 2018.

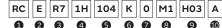
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Please check the MURATA website (https://www.murata.com/) if you cannot find a part number in this catalog.

#### Part Numbering

#### Leaded MLCC

(Part Number) RC



#### 1 Product ID

#### 2 Series

Product ID	Series Code	
RC	E	Leaded MLCC for Automotive
RH	E	150°C Operation Leaded MLCC for Automotive
RH	s	175°C/200°C Operation Leaded MLCC for Automotive
RD	E	Leaded MLCC for General Purpose

#### Temperature Characteristics

Temperatu	Temperature Characteristic Temperature Characteristics							
Code	Public S	TD Code	Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient	Operating Temperature Range		
5C	COG	EIA	25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C		
50	Cod	EIA	25 C	-55 to 25°C	0+30/-72ppm/°C	-55 to 125 C		
5G	VOC	*1	25°C	25 to 150°C	0±30ppm/°C	-55 to 150°C		
50		X8G *1 2		-55 to 25°C	0+30/-72ppm/°C	-55 to 150 °C		
				-55 to 25°C	0+30/-72ppm/°C			
7G	CCG	*1	25°C	25 to 125°C	0±30ppm/°C	-55 to 200°C		
				125 to 200°C	0+72/-30ppm/°C			
				-55 to 25°C	-750+120/-347ppm/°C			
<b>7</b> J	UNJ	UNJ	UNJ	*1	25°C	25 to 125°C	-750±120ppm/°C	-55 to 200°C
				125 to 200°C	-750+347/-120ppm/°C			
7U	U2J	EIA	25°C	25 to 125°C*2	-750±120ppm/°C	-55 to 125°C		
70	023	EIA	25-0	-55 to 25°C	-750+120/-347ppm/°C	-55 10 125 C		
C7	X7S	EIA	25°C	-55 to 125°C	±22%	-55 to 125°C		
D7	X7T	EIA	25°C	-55 to 125°C	+22%, -33%	-55 to 125°C		
L1	XAL	*1	25°C	-55 to 175°C	+15%, -40%	-55 to 175°C		
L8	X8L	*1	25°C	-55 to 150°C	+15%, -40%	-55 to 150°C		
N1	XAN	*1	25°C	-55 to 175°C	+15%, -60%	-55 to 175°C		
R7	X7R	EIA	25°C	-55 to 125°C	±15%	-55 to 125°C		

<sup>\*1</sup> Murata Temperature Characteristic Code.

#### 4Rated Voltage

Code	Rated Voltage
1E	DC25V
1H	DC50V
2A	DC100V
2D	DC200V
2E	DC250V
2W	DC450V
2H	DC500V
2J	DC630V
ЗА	DC1kV

#### **5**Capacitance

Expressed by three figures. The unit is pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two numbers. If there is a decimal point, it is expressed by the capital letter "R." In this case, all figures are significant digits.

#### **6**Capacitance Tolerance

Code	Capacitance Tolerance
С	±0.25pF
D	±0.5pF
J	±5%
K	±10%
М	±20%

Continued on the following page.  $\nearrow$ 

<sup>\*2</sup> Rated Voltage 100Vdc max: 25 to 85°C

### Continued from the preceding page. $\mbox{\ensuremath{\searrow}}$

### **7**Dimensions (LxW)

- (						
Code		Dimensions (LxW)				
	RCE Series	3.6×3.5mm max.				
	RHE Series	J.U. J.JIIIII IIIdX.				
0	RHS Series	3.8×3.5mm max.				
	RDE Series	4.0×3.5mm max. or 5.0×3.5mm max. (Depends on Part Number List)				
	RCE Series					
	RHE Series	4.0×3.5mm max.				
1	RHS Series					
	RDE Series	4.5×3.5mm max. or 5.0×3.5mm max. (Depends on Part Number List)				
2	5.5×4.0mm max.					
3		5.5×5.0mm max.				
4		7.5×5.5mm max.				
5	7.5×7.5mm max. (DC630V, DC1kV : 7.5×8.0mm max.)					
U	(DC630V	7.5×12.5mm max. , DC1kV : 7.5×13.0mm max.)				
W		5.5×7.5mm max.				

### 8 Lead Style

Code	Lead Style	Lead Spacing
A2	Straight Long	2.5mm
B1	Straight Long	5.0mm
DB/DG	Straight Taping	2.5mm
E1	Straight Taping	5.0mm
K1	Inside Crimp	5.0mm
M1/M2	Inside Crimp Taping	5.0mm
P1	Outside Crimp	2.5mm
S1	Outside Crimp Taping	2.5mm

## 9 Individual Specification Code

Expressed by three figures

#### Packaging

Code	Packaging
Α	Ammo Pack
В	Bulk

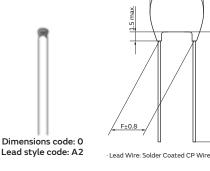
muRata

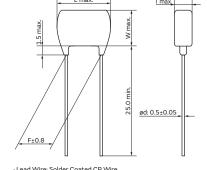
## Leaded MLCC for Automotive

## ■ RCE Series (DC25V-DC1kV)

#### **Features**

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 4. Meet LF (Lead Free) and HF (Halogen Free)
- 5. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 6. If copper wire is necessary at welding process, copper wire is available based on request.



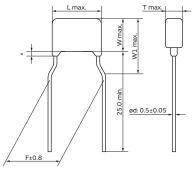


(in mm)

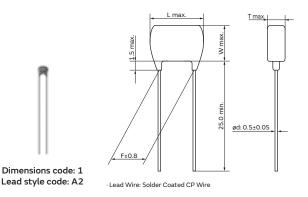
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(in mm)

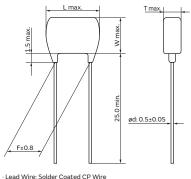


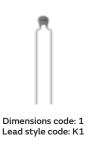


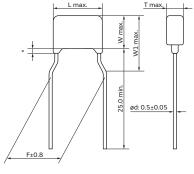
- Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire



Dimensions code: 2 Lead style code: A2

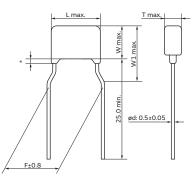






Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire



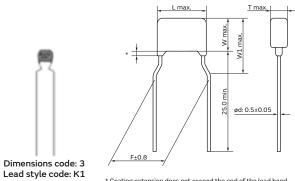


- Coating extension does not exceed the end of the lead bend.
- Lead Wire: Solder Coated CP Wire (in mm)

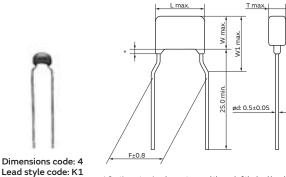
L max. ød: 0.5±0.05 Dimensions code: 3 Lead style code: A2 · Lead Wire: Solder Coated CP Wire

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(in mm)

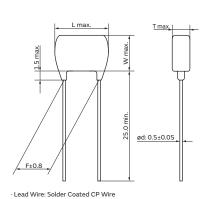


\* Coating extension does not exceed the end of the lead bend.  $\cdot$  Lead Wire: Solder Coated CP Wire

(in mm)





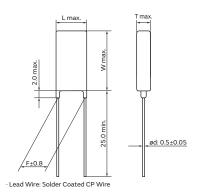


(in mm)



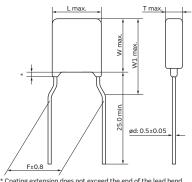


**Dimensions** 



(in mm)





Coating extension does not exceed the end of the lead bend.
Lead Wire: Solder Coated CP Wire

Lead Style Code     L       0A2/0DB     3.6       0K1/0M1     3.6       1A2/1DB     4.0	3.5	6.0	Т	F 2.5 5.0	d 0.5
<b>0K1/0M1</b> 3.6	3.5	6.0			
	3.5			5.0	
<b>1A2/1DB</b> 4.0		_		5.0	0.5
		- 1		2.5	0.5
1K1/1M1 4.0	3.5	5.0		5.0	0.5
<b>2A2/2DB</b> 5.5	4.0	-	See the individual product specification	2.5	0.5
<b>2K1/2M1</b> 5.5	4.0	6.0		5.0	0.5
<b>3A2/3DB</b> 5.5	5.0	-		2.5	0.5
<b>3K1/3M1</b> 5.5	5.0	7.5		5.0	0.5
4K1/4M1 7.5	5.5	8.0		5.0	0.5
<b>5B1/5E1</b> 7.5	7.5	k _		5.0	0.5
<b>UB1/UE1</b> 7.7	12.5	* -		5.0	0.5
WK1/WM1 5.5	7.5	10.0		5.0	0.5

\*DC630V, DC1kV: W+0.5mm

### Marking

Marking										
Rated Voltage	DC25V		DC50V			DC100V		DC250V	DC630V	DC1kV
Dimensions Char.	X7R	COG	X7S	X7R	COG	X7S	X7R	>	(7R, U2J, C0	G
0			-			-		-	-	-
1	224K	A 102J	105K	224K	A 102J	-	224K	(U2J) (U2J) (102K) (X7R)	-	-
2	(€,475) (€,475)	(€ 563) J5A	(*************************************	(M 105 K5C)	(P) 103	_	(M105)	(COG)	(COG)	(U2J)  (U2J)  (U2J)  (U2J)  (U2J)  (V7R)  (X7R)  (X7R)
3, 4, W	(M226 K2C)	-	(M106 K5C)	(M335) K5C	-	(M225) K1C	-	(W473 J4U (U2J) (W224 K4C (X7R)	(M103 J7U (U2J) (M104 K7C (X7R)	(U2J)  (W333)  KAC  (X7R)
5, U	-	-	-	-	-	-	-	- (M) 474 K4C (X7R)	(M) 333 J7U (U2J) (U2J) (M) 474 M7C (X7R)	(V2J)  (U2J)  (W104 KAC (X7R)
Temperature Characteristics			G char.: A, X7 se refer to th			: U)				
Nominal Capacitance	-	•	alue 100pF			figures				
Capacitance Tolerance	Marked w	ith code	se refer to th							
Rated Voltage			25V: 2, DC50 se refer to th			/: 4, DC630V	: 7, DC1kV: A	۸)		
Manufacturer's Identification	Marked w A part is o		se refer to th	e marking ex	ample.)					

## **■** Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H5R0C0□□H03□	COG (EIA)	50Vdc	5.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1

Continued from the preceding pa	age. 🔰							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H8R0D0□□H03□	COG (EIA)	50Vdc	8.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H8R0D0□□H03□	COG (EIA)	50Vdc	8.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H9R0D0□□H03□	COG (EIA)	50Vdc	9.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H220J0□□H03□	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H220J0□□H03□	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H270J0□□H03□	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H330J0□□H03□	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H330J0□□H03□	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H101J0 H03		50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H121J0 H03 RCE5C1H121J0 H03	COG (EIA)	50Vdc 50Vdc	120pF±5% 120pF±5%	3.6×3.5 3.6×3.5	2.5	2.5 5.0	A2 K1	DB M1
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H221J0□□H03□	COG (EIA)	50Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H391J0□□H03□	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H681J0□□H03□	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H821J0□□H03□	COG (EIA)	50Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H102J0□□H03□	COG (EIA)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB

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Continued from the preceding pa				Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW	T	F.	Code	Code
DCEEC1U102 IO□□U02□			1000pE+E9/	(mm)	(mm) 2.5	(mm)	Bulk	Taping M1
RCE5C1H102J0 H03 RCE5C1H122J0 H03	COG (EIA)	50Vdc 50Vdc	1000pF±5% 1200pF±5%	3.6×3.5 3.6×3.5	2.5	5.0 2.5	K1 A2	DB
RCE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H332J0□□H03□	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H392J0□□H03□	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H472J1□□H03□	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H562J1□□H03□	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H682J1□□H03□	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H822J1□□H03□	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H223J1 H03	COG (EIA)	50Vdc	22000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H223J1 H03		50Vdc	22000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	A2	DB M1
RCE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1 DB
RCE5C1H473J2 H03 RCE5C1H473J2 H03	COG (EIA)	50Vdc 50Vdc	47000pF±5% 47000pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	2.5 5.0	A2 K1	
RCE5C1H473J2 H03	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0 5.5×4.0	3.15	2.5	A2	M1 DB
RCE5C1H563J2 H03	, ,	50Vdc	56000pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1
RCE5C1H683J2 H03	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H683J2 H03	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H823J2 H03	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H823J2 H03	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H104J2 H03	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H104J2 H03	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A1R0C0□□H03□	, ,	100Vdc	1.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A1R0C0 H03	, ,	100Vdc	1.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A2R0C0 H03	, ,	100Vdc	2.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A2R0C0□□H03□	, ,	100Vdc	2.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A3R0C0□□H03□	COG (EIA)	100Vdc	3.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A3R0C0□□H03□	COG (EIA)	100Vdc	3.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A4R0C0 H03	COG (EIA)	100Vdc	4.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A4R0C0 H03	COG (EIA)	100Vdc	4.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1

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Research   Part Number   Capacitanos   Cap	Continued from the preceding pa	age. 🔰							
RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   70/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   70/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   70/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   2.5   A2   DB   RCESC2ARGROD_    H03    COG   GIA    100/dc   50/pF10.5pf   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   10/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    100/dc   15/pF15/s   3.6-1.5   2.5   5.0   K1   M1   RCESC2ARGROD_    H03    COG   GIA    1	Part Number			Capacitance		Dimension T (mm)	Lead Space F (mm)		
RCESC2ARRODO_  H03    COG_(EIA)   100Vdc   COPP-0.5pF   3.6-3.5   2.5   5.0   K1   M1	RCE5C2A5R0C0□□H03□	COG (EIA)	100Vdc	5.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCESC2ARRODO	RCE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCESC2A7R0DOID  H03   COG (EIA)   100Vdc   7.0pFi-0.5pF   3.6-3.5   2.5   5.0   K1   M1	RCE5C2A6R0D0□□H03□	COG (EIA)	100Vdc	6.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCESC2ARBODO    H031   COG (RIA)   100Vdc   80pH-0.5pF   3.6-3.5   2.5   5.0   K1   M1   RCESC2ABRODO    H031   COG (RIA)   100Vdc   80pH-0.5pF   3.6-3.5   2.5   5.0   K1   M1   RCESC2ABRODO    H031   COG (RIA)   100Vdc   80pH-0.5pF   3.6-3.5   2.5   5.0   K1   M1   RCESC2ABRODO    H032   COG (RIA)   100Vdc   80pH-0.5pF   3.6-3.5   2.5   5.0   K1   M1   RCESC2ABRODO    H032   COG (RIA)   100Vdc   100PH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2ABRODO    H032   COG (RIA)   100Vdc   100PH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1000    H032   COG (RIA)   100Vdc   100PH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1000    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1200    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1200    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1500    H032   COG (RIA)   100Vdc   15pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1500    H032   COG (RIA)   100Vdc   15pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1800    H032   COG (RIA)   100Vdc   15pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1800    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1800    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A1800    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A200    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A200    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   12pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   22pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   33pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   33pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   80pH-5%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A300    H032   COG (RIA)   100Vdc   80pH-5%   3.6-3.5   2.5   5.0   K	RCE5C2A6R0D0□□H03□	COG (EIA)	100Vdc	6.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCESC2A8RODO    H03   COG (EIA)   100Vdc   8.0pFr.0.5pF   3.6-3.5   2.5   2.5   A2   DB	RCE5C2A7R0D0□□H03□	COG (EIA)	100Vdc	7.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCESC2A8RODO	RCE5C2A7R0D0 H03	COG (EIA)	100Vdc	7.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCESC2A39R0D0	RCE5C2A8R0D0□□H03□	COG (EIA)	100Vdc	8.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCESC2A19000	RCE5C2A8R0D0□□H03□	COG (EIA)	100Vdc	8.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCESC2A100J0_   H03   COG_[EIA]   100Vdc   10pF15%   3.6-3.5   2.5   2.5   A2   DB	RCE5C2A9R0D0□□H03□	COG (EIA)	100Vdc	9.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCESC2A120JO	RCE5C2A9R0D0□□H03□	COG (EIA)	100Vdc	9.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCESC2A120.0   H03	RCE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A150J0	RCE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A150J0	RCE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A150J0   H03   COG (EIA)   100Vdc   15pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A180J0   H03   COG (EIA)   100Vdc   18pF±5%   3.6+3.5   2.5   2.5   A2   DB   RCESC2A180J0   H03   COG (EIA)   100Vdc   18pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A220J0   H03   COG (EIA)   100Vdc   22pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A270J0   H03   COG (EIA)   100Vdc   22pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A270J0   H03   COG (EIA)   100Vdc   27pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A270J0   H03   COG (EIA)   100Vdc   27pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A370J0   H03   COG (EIA)   100Vdc   27pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A370J0   H03   COG (EIA)   100Vdc   33pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   33pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   33pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   33pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   47pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   47pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03   COG (EIA)   100Vdc   47pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A560J0   H03   COG (EIA)   100Vdc   56pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A560J0   H03   COG (EIA)   100Vdc   56pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A660J0   H03   COG (EIA)   100Vdc   56pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A660J0   H03   COG (EIA)   100Vdc   68pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A60J0   H03   COG (EIA)   100Vdc   82pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A60J0   H03   COG (EIA)   100Vdc   82pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A121J0   H03   COG (EIA)   100Vdc   82pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A121J0   H03   COG (EIA)   100Vdc   100pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A121J0   H03   COG (EIA)   100Vdc   100pF±5%   3.6+3.5   2.5   5.0   K1   M1   RCESC2A121J0   H03   COG (EI	RCE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A180J0     H03    COG (EIA)   100Vdc   18pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A20J0     H03    COG (EIA)   100Vdc   18pF15%   3.6-3.5   2.5   5.0   K1   M1   M1   RCESC2A220J0     H03    COG (EIA)   100Vdc   22pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A220J0     H03    COG (EIA)   100Vdc   22pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A270J0     H03    COG (EIA)   100Vdc   22pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A270J0     H03    COG (EIA)   100Vdc   22pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A330J0   H03    COG (EIA)   100Vdc   33pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A330J0   H03    COG (EIA)   100Vdc   33pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A330J0   H03    COG (EIA)   100Vdc   33pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03    COG (EIA)   100Vdc   33pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03    COG (EIA)   100Vdc   33pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03    COG (EIA)   100Vdc   47pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A390J0   H03    COG (EIA)   100Vdc   47pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A470J0   H03    COG (EIA)   100Vdc   47pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A470J0   H03    COG (EIA)   100Vdc   47pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A450J0   H03    COG (EIA)   100Vdc   47pF15%   3.6-3.5   2.5   2.5   A2   DB   RCESC2A680J0   H03    COG (EIA)   100Vdc   68pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A680J0   H03    COG (EIA)   100Vdc   68pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A680J0   H03    COG (EIA)   100Vdc   82pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A680J0   H03    COG (EIA)   100Vdc   82pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A101J0   H03    COG (EIA)   100Vdc   82pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A101J0   H03    COG (EIA)   100Vdc   82pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A101J0   H03    COG (EIA)   100Vdc   100pF15%   3.6-3.5   2.5   5.0   K1   M1   RCESC2A101J0   H03    COG (EIA)   100Vdc   100pF15%   3.6-3.5   2.5   5.	RCE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A23000   H03	RCE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A220J0   H03	RCE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A270JO_H03_  COG (EIA) 100Vdc   22pF±5%   3.6×3.5   2.5   5.0   K1   M1	RCE5C2A180J0□□H03□	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A270J0□H03□	RCE5C2A220J0□□H03□	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A330J0	RCE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A330J0	RCE5C2A270J0□□H03□	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A39J0	RCE5C2A270J0□□H03□	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A390J0   H03	RCE5C2A330J0□□H03□	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A390J0□H03□	RCE5C2A330J0□□H03□	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A470J0□H03□ COG (EIA)   100Vdc	RCE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCESC2A470J0□□H03□         COG (EIA)         100Vdc         47PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A56J0□□H03□         COG (EIA)         100Vdc         56PF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A680J0□□H03□         COG (EIA)         100Vdc         56PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A680J0□□H03□         COG (EIA)         100Vdc         68PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A820J0□□H03□         COG (EIA)         100Vdc         82PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A820J0□□H03□         COG (EIA)         100Vdc         82PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A10JJ0□H03□         COG (EIA)         100Vdc         100PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A10J0□□H03□         COG (EIA)         100Vdc         120PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A12J0□□H03□         COG (EIA)         100Vdc         120PF±5%         3.6×3.5	RCE5C2A390J0□□H03□	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCESC2A560J0□H03□ COG (EIA)         100Vdc         56pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A560J0□H03□ COG (EIA)         100Vdc         56pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A680J0□H03□ COG (EIA)         100Vdc         68pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A680J0□H03□ COG (EIA)         100Vdc         88pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A820J0□H03□ COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A10JJ0□H03□ COG (EIA)         100Vdc         100Pf±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A12J0□H03□ COG (EIA)         100Vdc         100Pf±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A12J0□H03□ COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A12J0□H03□ COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A18J0□H03□ COG (EIA)         <	RCE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A560J0□□H03□         COG (EIA)         100Vdc         56pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A680J0□□H03□         COG (EIA)         100Vdc         68pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A680J0□□H03□         COG (EIA)         100Vdc         68pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A820J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A10J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A12J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A12J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.	RCE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A680J0□□H03□         COG (EIA)         100Vdc         68pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A680J0□□H03□         COG (EIA)         100Vdc         68pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A82J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A82J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A101J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6	RCE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A680J0□□H03□ COG (EIA) 100Vdc 68pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A820J0□□H03□ COG (EIA) 100Vdc 82pF±5% 3.6×3.5 2.5 2.5 A2 DB  RCE5C2A820J0□□H03□ COG (EIA) 100Vdc 82pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A10JJ0□□H03□ COG (EIA) 100Vdc 100pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A10JJ0□□H03□ COG (EIA) 100Vdc 100pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A12JJ0□□H03□ COG (EIA) 100Vdc 120pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A12JJ0□□H03□ COG (EIA) 100Vdc 120pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A12JJ0□□H03□ COG (EIA) 100Vdc 120pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A15JJ0□□H03□ COG (EIA) 100Vdc 150pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A15JJ0□□H03□ COG (EIA) 100Vdc 150pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A15JJ0□□H03□ COG (EIA) 100Vdc 150pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A18JJ0□□H03□ COG (EIA) 100Vdc 180pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A18JJ0□□H03□ COG (EIA) 100Vdc 180pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A21J0□□H03□ COG (EIA) 100Vdc 180pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A22JJ0□□H03□ COG (EIA) 100Vdc 220pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A22JJ0□□H03□ COG (EIA) 100Vdc 220pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A22JJ0□□H03□ COG (EIA) 100Vdc 220pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A27JJ0□□H03□ COG (EIA) 100Vdc 270pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A33JJ0□□H03□ COG (EIA) 100Vdc 330pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A36JJ0□□H03□ COG (EIA) 100Vdc 30pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A36JJ0□□H03□ COG (EIA) 100Vdc 470pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A68JJ0□□H03□ COG (EIA) 100Vdc 470pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A68JJ0□□H03□ COG (EIA) 100Vdc 680pF±5% 3.6×3.5 2.5 5.0 K1 M1  RCE5C2A68JJ0□□H03□ COG (EIA) 100Vdc 680pF±5% 3.6×3.5 2.5 5.0 K1 M1	RCE5C2A560J0 H03	` ,	100Vdc	56pF±5%	3.6×3.5		5.0	K1	M1
RCE5C2A820J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A820J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A101J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A211J0□□H03□         COG (EIA)         100Vdc         220pF±5% <th< th=""><th>RCE5C2A680J0 H03</th><th>COG (EIA)</th><th>100Vdc</th><th>68pF±5%</th><th></th><th></th><th></th><th></th><th></th></th<>	RCE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%					
RCE5C2A820J0□□H03□         COG (EIA)         100Vdc         82pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A10J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A10J0□□H03□         COG (EIA)         100Vdc         100pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A12J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A18J0□□H03□         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A22J10□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A27J10□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×		, ,		·					
RCE5C2A101J0□□H03□         COG (EIA)         100Vdc         100Pf±5%         3.6*3.5         2.5         2.5         A2         DB           RCE5C2A101J0□□H03□         COG (EIA)         100Vdc         100Pf±5%         3.6*3.5         2.5         5.0         K1         M1           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120Pf±5%         3.6*3.5         2.5         2.5         A2         DB           RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120Pf±5%         3.6*3.5         2.5         5.0         K1         M1           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150Pf±5%         3.6*3.5         2.5         2.5         A2         DB           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         180Pf±5%         3.6*3.5         2.5         5.0         K1         M1           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         180Pf±5%         3.6*3.5         2.5         5.0         K1         M1           RCE5C2A221J0□□H03□         COG (EIA)         100Vdc         220Pf±5%         3.6*3.5         2.5         5.0         K1         M1           RCE5C2A271J0□H03□         COG (EIA)         100Vdc         270Pf±5% <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>									
RCE5C2A101J0□□H03□ COG (EIA)         100Vdc         100PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A12J0□□H03□ COG (EIA)         100Vdc         120PF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A12J0□□H03□ COG (EIA)         100Vdc         120PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□ COG (EIA)         100Vdc         150PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A15J0□□H03□ COG (EIA)         100Vdc         150PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A18J0□□H03□ COG (EIA)         100Vdc         180PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A18J0□□H03□ COG (EIA)         100Vdc         180PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A22J0□□H03□ COG (EIA)         100Vdc         220PF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A27J0□H03□ COG (EIA)         100Vdc         270PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A27J0□H03□ COG (EIA)		, ,							
RCE5C2A121JO         HO3         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A121JO         HO3         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A151JO         HO3         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A151JO         HO3         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A181JO         HO3         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A21B1JO         HO3         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A221JO         HO3         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271JO         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A121J0□□H03□         COG (EIA)         100Vdc         120pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A151J0□□H03□         COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A181J0□□H03□         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A221J0□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0□□H03□         COG (EIA)         100Vdc         330pF±5%         <		, ,							
RCE5C2A151J0□H03□ COG (EIA)         COG (EIA)         100Vdc         150PF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A151J0□H03□ COG (EIA)         100Vdc         150PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A181J0□H03□ COG (EIA)         100Vdc         180PF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A21BJ0□H03□ COG (EIA)         100Vdc         180PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A221J0□H03□ COG (EIA)         100Vdc         220PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□H03□ COG (EIA)         100Vdc         270PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□H03□ COG (EIA)         100Vdc         270PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0□H03□ COG (EIA)         100Vdc         270PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0□H03□ COG (EIA)         100Vdc         330PF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2		` '							
RCESC2A151J0□H03□ COG (EIA)         100Vdc         150pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A181J0□H03□ COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A181J0□H03□ COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A221J0□H03□ COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A221J0□H03□ COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A271J0□H03□ COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A371J0□H03□ COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A331J0□H03□ COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A391J0□H03□ COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A471J0□H03□ COG (EIA)		, ,							
RCESC2A181J0□HO3□ COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCESC2A181J0□HO3□ COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A22JJ0□HO3□ COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A22JJ0□HO3□ COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A27JJ0□HO3□ COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A27JJ0□HO3□ COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A33JJ0□HO3□ COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A39JJ0□HO3□ COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A39JJ0□HO3□ COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCESC2A47JJ0□HO3□ COG (EIA)		, ,							
RCE5C2A181JO         HO3         COG (EIA)         100Vdc         180pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A221JO         HO3         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A221JO         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271JO         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A371JO         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331JO         HO3         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331JO         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391JO         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A221J0□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A221J0□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0□□H03□         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0□□H03□         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0□□H03□         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0□□H03□         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0□□H03□         COG (EIA)         100Vdc         560pF±5%         <		, ,							
RCE5C2A221J0□□H03□         COG (EIA)         100Vdc         220pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A271J0□□H03□         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0□□H03□         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0□□H03□         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0□□H03□         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0□□H03□         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0□□H03□         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0□□H03□         COG (EIA)         100Vdc         560pF±5%         <		, ,							
RCE5C2A271J0         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A271J0         HO3         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0         HO3         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A271J0         H03         COG (EIA)         100Vdc         270pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A331J0         H03         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A331J0         H03         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         H03         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         H03         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         H03         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         H03         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         H03         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,		·					
RCE5C2A331J0         H03         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A331J0         H03         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         H03         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         H03         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         H03         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         H03         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         H03         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         H03         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A331J0         HO3         COG (EIA)         100Vdc         330pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A391J0         HO3         COG (EIA)         100Vdc         390pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A471J0         HO3         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A471J0         H03         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A471J0         H03         COG (EIA)         100Vdc         470pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A561J0         H03         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         H03         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A681J0         H03         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		, ,							
RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A561J0         HO3         COG (EIA)         100Vdc         560pF±5%         3.6×3.5         2.5         5.0         K1         M1           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1		. ,				2.5	2.5		DB
RCE5C2A561J0□□H03□       COG (EIA)       100Vdc       560pF±5%       3.6×3.5       2.5       5.0       K1       M1         RCE5C2A681J0□□H03□       COG (EIA)       100Vdc       680pF±5%       3.6×3.5       2.5       2.5       A2       DB         RCE5C2A681J0□□H03□       COG (EIA)       100Vdc       680pF±5%       3.6×3.5       2.5       5.0       K1       M1	RCE5C2A471J0□□H03□	COG (EIA)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         2.5         A2         DB           RCE5C2A681J0         HO3         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1	RCE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A681J0□□H03□         COG (EIA)         100Vdc         680pF±5%         3.6×3.5         2.5         5.0         K1         M1	RCE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
	RCE5C2A681J0□□H03□	COG (EIA)	100Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A821J0□□H03□         COG (EIA)         100Vdc         820pF±5%         3.6×3.5         2.5         2.5         A2         DB	RCE5C2A681J0□□H03□	COG (EIA)	100Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
	RCE5C2A821J0□□H03□	COG (EIA)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB

Continued from the preceding pa	age. 🔰							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C2A821J0□□H03□	COG (EIA)	100Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A122J0□□H03□	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A122J0□□H03□	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A182J1□□H03□	COG (EIA)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A222J1□□H03□	COG (EIA)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A272J1□□H03□	COG (EIA)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A272J1 H03	COG (EIA)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A332J1□□H03□	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A332J1□□H03□	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A392J2□□H03□	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A562J2□□H03□	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A103J2 H03	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A103J2 H03	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E100J2 H03	COG (EIA)	250Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E120J2 H03	COG (EIA)	250Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E150J2 H03	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E180J2 H03	COG (EIA)	250Vdc 250Vdc	18pF±5% 22pF±5%	5.5×4.0 5.5×4.0	3.15	5.0 5.0	K1 K1	M1 M1
RCE5C2E220J2 H03 RCE5C2E270J2 H03	COG (EIA)	250Vdc 250Vdc	27pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1
RCE5C2E330J2 H03	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E390J2 H03	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E470J2 H03	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E560J2 H03	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E680J2 H03	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E820J2 H03	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E101J2 H03	COG (EIA)	250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E121J2 H03	COG (EIA)	250Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E151J2 H03	COG (EIA)	250Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E181J2 H03	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E221J2 H03	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E271J2□□H03□	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E331J2□□H03□	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E391J2□□H03□	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E471J2 H03	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E681J2 H03	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E821J2 H03	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E102J2 H03	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E122J2 H03	COG (EIA)	250Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E152J2 H03	COG (EIA)	250Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E182J2 H03	COG (EIA)	250Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E222J2 H03	COG (EIA)	250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E272J2 H03	COG (EIA)	250Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C2E332J2□□H03□	COG (EIA)	250Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E392J2□□H03□	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E472J2 H03	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E682J2 H03	COG (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E822J2 H03	COG (EIA)	250Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E103J2 H03	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E123J2 H03	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E153J2 H03	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J270J2 H03	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J390J2□□H03□	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J470J2 H03	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J560J2□□H03□	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J680J2 H03	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J221J2 H03	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J271J2 H03	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J331J2 H03	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J391J2 H03	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J471J2 H03	COG (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J561J2 H03	COG (EIA)	630Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J681J2 H03	COG (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J821J2 H03	COG (EIA)	630Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J102J2 H03	COG (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J122J2 H03	COG (EIA)	630Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J152J2 H03	COG (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J182J2 H03 RCE5C2J222J2 H03	COG (EIA)	630Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15 3.15	5.0	K1	M1
RCE5C2J272J2 H03 RCE5C2J332J2 H03	COG (EIA)	630Vdc 630Vdc	2700pF±5% 3300pF±5%	5.5×4.0 5.5×4.0	3.15	5.0 5.0	K1 K1	M1 M1
RCE5C3A100J2 H03	COG (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A120J2 H03	COG (EIA)	1000Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A150J2 H03	COG (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A180J2 H03	COG (EIA)	1000Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A220J2 H03	COG (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A270J2 H03	COG (EIA)	1000Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A330J2 H03	COG (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A390J2 H03	COG (EIA)	1000Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A470J2 H03	COG (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A560J2□□H03□	COG (EIA)	1000Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A680J2□□H03□	COG (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A820J2□□H03□	COG (EIA)	1000Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A101J2 H03	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A121J2□□H03□	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A151J2□□H03□	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A181J2□□H03□	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A221J2□□H03□	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1

Continued from the preceding pa				Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW	T	F.	Code	Code
DOEE 02 4 2 7 1 12 12 12 12 12 12 12 12 12 12 12 12 1			270=5:50/	(mm)	(mm)	(mm)	Bulk	Taping
RCE5C3A271J2 H03	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A331J2 H03	COG (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A391J2 H03	COG (EIA)	1000Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A471J2 H03	COG (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A561J2 H03	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A681J2 H03	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A821J2 H03	COG (EIA)	1000Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A102J2 H03	COG (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2E101J1 H03	U2J (EIA)	250Vdc	100pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E151J1 H03	U2J (EIA)	250Vdc	150pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E221J1 H03	U2J (EIA)	250Vdc	220pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E331J1 H03	U2J (EIA)	250Vdc	330pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E471J1 H03	U2J (EIA)	250Vdc	470pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E681J1□□H03□	U2J (EIA)	250Vdc	680pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E102J1 H03	U2J (EIA)	250Vdc	1000pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E152J1□□H03□	U2J (EIA)	250Vdc	1500pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E222J1□□H03□	U2J (EIA)	250Vdc	2200pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E332J1 H03	U2J (EIA)	250Vdc	3300pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E472J1□□H03□	U2J (EIA)	250Vdc	4700pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E682J2□□H03□	U2J (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2E103J2□□H03□	U2J (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J100J2□□H03□	U2J (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J150J2 H03	U2J (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J220J2□□H03□	U2J (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J330J2□□H03□	U2J (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J470J2□□H03□	U2J (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J680J2□□H03□	U2J (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J101J2 H03	U2J (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J151J2□□H03□	U2J (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J221J2□□H03□	U2J (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J331J2□□H03□	U2J (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J471J2□□H03□	U2J (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J681J2□□H03□	U2J (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J102J2□□H03□	U2J (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J152J2□□H03□	U2J (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J222J2□□H03□	U2J (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J332J2□□H03□	U2J (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J472J2□□H03□	U2J (EIA)	630Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J682J3□□H03□	U2J (EIA)	630Vdc	6800pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U2J103J3□□H03□	U2J (EIA)	630Vdc	10000pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U2J153J4□□H03□	U2J (EIA)	630Vdc	15000pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U2J223J4□□H03□	U2J (EIA)	630Vdc	22000pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U2J333J5□□H03□	U2J (EIA)	630Vdc	33000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U2J473J5□□H03□	U2J (EIA)	630Vdc	47000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U2J943JU□□H03□	U2J (EIA)	630Vdc	94000pF±5%	7.7×13.0	4.0	5.0	B1	E1
RCE7U3A100J2□□H03□	U2J (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A150J2□□H03□	U2J (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A220J2□□H03□	U2J (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A330J2□□H03□	U2J (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A470J2□□H03□	U2J (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A680J2□□H03□	U2J (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A101J2 H03	U2J (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A151J2□□H03□	U2J (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A221J2□□H03□	U2J (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A331J2□□H03□	U2J (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A471J2□□H03□	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A681J2□□H03□	U2J (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1

#### Continued from the preceding page. $\searrow$

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE7U3A102J2□□H03□	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A152J3 H03	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U3A222J3□□H03□	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U3A332J4□□H03□	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U3A472J4□□H03□	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U3A682J5 H03	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U3A103J5 H03	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U3A203JU□□H03□	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

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	Temp.	Rated		Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Char.	Voltage	Capacitance	LxW (mm)	T (mm)	F <sup>*</sup> (mm)	Code Bulk	Code Taping
RCER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E154K0□□H03□	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E154K0□□H03□	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E224K0□□H03□	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E224K0□□H03□	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E334K1□□H03□	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E334K1□□H03□	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E474K1□□H03□	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E474K1□□H03□	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E684K1□□H03□	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E684K1□□H03□	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E105K1□□H03□	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E105K1 H03	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E155K2□□H03□	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E155K2□□H03□	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E225K2□□H03□	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E225K2□□H03□	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E335K2□□H03□	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E335K2□□H03□	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E475K2□□H03□	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E475K2□□H03□	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E106K3□□H03□	X7R (EIA)	25Vdc	10μF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71E106K3□□H03□	X7R (EIA)	25Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71E226MW□□H03□	X7R (EIA)	25Vdc	22μF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H331K0□□H03□	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H471K0□□H03□	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H471K0□□H03□	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)  $\,$ 

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER71H472K0□□H03□	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H223K0□□H03□	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H333K0□□H03□	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H473K0□□H03□	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H473K0□□H03□	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H683K0□□H03□	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H683K0□□H03□	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H104K0□□H03□	X7R (EIA)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H104K0□□H03□	X7R (EIA)	50Vdc	0.10µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H154K1□□H03□	X7R (EIA)	50Vdc	0.15µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H154K1□□H03□	X7R (EIA)	50Vdc	0.15µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H224K1□□H03□	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H224K1□□H03□	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H334K1□□H03□	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H334K1□□H03□	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H474K1□□H03□	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H474K1□□H03□	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H684K2□□H03□	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H684K2 H03	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H155K2 H03 RCER71H155K2 H03	X7R (EIA) X7R (EIA)	50Vdc 50Vdc	1.5μF±10% 1.5μF±10%	5.5×4.0 5.5×4.0	3.15 3.15	2.5 5.0	A2 K1	DB M1
RCER71H135K2   H03   RCER71H225K2   H03	X7R (EIA)	50Vdc	2.2μF±10%	5.5×4.0 5.5×4.0	3.15	2.5	A2	DB
RCER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H475K2□□H03□	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCEC71H475K2□□H03□	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H475K3□□H03□	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71H475K3□□H03□	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H106K3□□H03□	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC71H106K3□□H03□	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71H106MW□□H03□	X7R (EIA)	50Vdc	10μF±20%	5.5×7.5	4.0	5.0	K1	M1
RCEC71H226MW□□H03□	X7S (EIA)	50Vdc	22μF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72A221K0□□H03□	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A221K0□□H03□	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A471K0□□H03□	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A471K0□□H03□	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A102K0 H03	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A102K0 H03	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A152K0 H03	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
		Voltage		(mm)	(mm)	(mm)	Bulk	Taping
RCER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A332K0□□H03□	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A332K0□□H03□	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A472K0□□H03□	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A682K0□□H03□	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A103K0□□H03□	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A153K0□□H03□	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A153KO□□H03□	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A223K0□□H03□	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A223K0□□H03□	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A333K1□□H03□	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A333K1□□H03□	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A473K1□□H03□	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A473K1□□H03□	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A683K1□□H03□	X7R (EIA)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A683K1□□H03□	X7R (EIA)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A104K1□□H03□	X7R (EIA)	100Vdc	0.10µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A104K1□□H03□	X7R (EIA)	100Vdc	0.10µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A154K2□□H03□	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A154K2□□H03□	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A224K2□□H03□	X7R (EIA)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A224K2□□H03□	X7R (EIA)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A334K1□□H03□	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A474K2 H03	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A474K2 H03	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC72A155K3 H03	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0 5.5×5.0	4.0	2.5	A2	DB M1
RCEC72A155K3 H03	X7S (EIA)	100Vdc 100Vdc	1.5µF±10% 2.2µF±10%	5.5×5.0 5.5×5.0	4.0	5.0 2.5	K1 A2	DB
RCEC72A225K3□□H03□ RCEC72A225K3□□H03□	X7S (EIA) X7S (EIA)	100Vdc	2.2μF±10% 2.2μF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC72A475MW H03	X75 (EIA)	100Vdc	4.7μF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72E102K1 H03	X73 (EIA)	250Vdc	1000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E152K1 H03	X7R (EIA)	250Vdc	1500pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E222K1 H03	X7R (EIA)	250Vdc	2200pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E332K1 H03	X7R (EIA)	250Vdc	3300pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E472K1 H03	X7R (EIA)	250Vdc	4700pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E682K1 H03	X7R (EIA)	250Vdc	6800pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E103K1 H03	X7R (EIA)	250Vdc	10000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E153K1 H03	X7R (EIA)	250Vdc	15000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E223K1 H03	X7R (EIA)	250Vdc	22000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E333K2 H03	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E473K2 H03	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E683K2 H03	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E104K2 H03	X7R (EIA)	250Vdc	0.10µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72E154K3 H03	X7R (EIA)	250Vdc	0.15µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72E224K3 H03	X7R (EIA)	250Vdc	0.22µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72E334K4 HO3	X7R (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72E474K4 H03	X7R (EIA)	250Vdc	0.47µF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72E684K5□□H03□	X7R (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.0	5.0	B1	E1
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Part Number   Char   Voltage   Capacitance   LxW   (mm)   (mm)   (mm)   Bulk   Taping   RCER7ZE105K5   H03   X7R (EIA)   250Vdc   1.0µF±10%   7.5×7.5   4.0   5.0   B1   E1   RCER7Z130ZK2  H03   X7R (EIA)   630Vdc   1.00pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J2ZK2  H03   X7R (EIA)   630Vdc   1.000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J2ZK2  H03   X7R (EIA)   630Vdc   2.20pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J2ZK2  H03   X7R (EIA)   630Vdc   2.20pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J3ZK2  H03   X7R (EIA)   630Vdc   2.20pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J3ZK2  H03   X7R (EIA)   630Vdc   3300PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J3ZK2  H03   X7R (EIA)   630Vdc   6800PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J05K2  H03   X7R (EIA)   630Vdc   6800PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J15XC2  H03   X7R (EIA)   630Vdc   10000PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J15XC2  H03   X7R (EIA)   630Vdc   15000PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J33X3  H03   X7R (EIA)   630Vdc   15000PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER7Z1J33X3  H03   X7R (EIA)   630Vdc   22000PF±10%   5.5×6.0   3.15   5.0   K1   M1   RCER7Z1J3X3  H03   X7R (EIA)   630Vdc   33000PF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER7Z1J63K4  H03   X7R (EIA)   630Vdc   300Vdc   37000PF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER7Z1J63K4  H03   X7R (EIA)   630Vdc   68000PF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER7Z1J24K5  H03   X7R (EIA)   630Vdc   6000PF±10%   7.5×6.0   4.0   5.0   B1   E1   RCER7Z1J24K5  H03   X7R (EIA)   630Vdc   0.19µF±10%   7.5×6.0   4.0   5.0   B1   E1   RCER7Z1J24K5  H03   X7R (EIA)   630Vdc   0.19µF±10%   7.5×6.0   4.0   5.0   B1   E1   RCER7Z3J3ZK2  H03   X7R (EIA)   630Vdc   0.19µF±10%   7.5×6.0   4.0   5.0   B1   E1   RCER7Z3J3ZK2  H03   X7R (EIA)   1000Vdc   1000PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A10ZK2  H03   X7R (EIA)   1000Vdc   1000PF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A32ZK2  H03   X7R (EIA)	Continued from the preceding pa	continued from the preceding page. 3							
RCER72J225MU	Part Number			Capacitance		Dimension T (mm)	Lead Space F (mm)		
RCER72J102K2	RCER72E105K5□□H03□	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1
RCER72J152K2	RCER72E225MU□□H03□	X7R (EIA)	250Vdc	2.2µF±20%	7.5×12.5	4.0	5.0	B1	E1
RCER72J222K2□H03□	RCER72J102K2□□H03□	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J332K2□H03□	RCER72J152K2□□H03□	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J472K2□H03□ X7R (EIA)   630Vdc   4700F±10%   5.5×4.0   3.15   5.0   K1   M1	RCER72J222K2□□H03□	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J682K2□H03□ X7R (EIA) 630Vdc 6800pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER72J103K2□H03□ X7R (EIA) 630Vdc 1000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER72J153K2□H03□ X7R (EIA) 630Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER72J233K2□H03□ X7R (EIA) 630Vdc 22000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER72J233K3□H03□ X7R (EIA) 630Vdc 22000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER72J373K3□H03□ X7R (EIA) 630Vdc 47000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER72J473K3□H03□ X7R (EIA) 630Vdc 68000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER72J473K3□H03□ X7R (EIA) 630Vdc 68000pF±10% 7.5×5.5 4.0 5.0 K1 M1   RCER72J104K4□H03□ X7R (EIA) 630Vdc 0.10µF±10% 7.5×5.5 4.0 5.0 K1 M1   RCER72J145K5□H03□ X7R (EIA) 630Vdc 0.10µF±10% 7.5×8.0 4.0 5.0 B1 E1   RCER72J247K9□□H03□ X7R (EIA) 630Vdc 0.22µF±10% 7.5×8.0 4.0 5.0 B1 E1   RCER72J474M9□□H03□ X7R (EIA) 630Vdc 0.47µF±20% 7.7×13.0 4.0 5.0 B1 E1   RCER73A152K2□H03□ X7R (EIA) 1000Vdc 1000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A152K2□H03□ X7R (EIA) 1000Vdc 1000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A22ZK2□H03□ X7R (EIA) 1000Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A22ZK2□H03□ X7R (EIA) 1000Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A682K2□H03□ X7R (EIA) 1000Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A682K2□H03□ X7R (EIA) 1000Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A153K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A153K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A232K2□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×4.0 3.15 5.0 K1 M1   RCER73A233K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A23K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A238K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A233K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A233K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A233K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A233K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1   RCER73A473K4□H03□ X7R (EIA) 1000Vdc 1	RCER72J332K2□□H03□	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J103K2	RCER72J472K2□□H03□	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J153K2	RCER72J682K2□□H03□	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J223K2□H03□	RCER72J103K2□□H03□	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J333K3□H03□   X7R (EIA)   630Vdc   33000pF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER72J473K3□H03□   X7R (EIA)   630Vdc   4700pF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER72J683K4□H03□   X7R (EIA)   630Vdc   68000pF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER72J104K4□H03□   X7R (EIA)   630Vdc   0.10µF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER72J154K5□H03□   X7R (EIA)   630Vdc   0.15µF±10%   7.5×8.0   4.0   5.0   B1   E1   RCER72J224K5□H03□   X7R (EIA)   630Vdc   0.22µF±10%   7.5×8.0   4.0   5.0   B1   E1   RCER72J474MU□H03□   X7R (EIA)   630Vdc   0.47µF±20%   7.7×13.0   4.0   5.0   B1   E1   RCER73A102K2□H03□   X7R (EIA)   630Vdc   1000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A152K2□H03□   X7R (EIA)   1000Vdc   1500pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A3222K2□H03□   X7R (EIA)   1000Vdc   2200pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A472K2□H03□   X7R (EIA)   1000Vdc   4700pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A682K2□H03□   X7R (EIA)   1000Vdc   4700pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A682K2□H03□   X7R (EIA)   1000Vdc   6800pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A103K2□H03□   X7R (EIA)   1000Vdc   10000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A103K2□H03□   X7R (EIA)   1000Vdc   10000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A682K2□H03□   X7R (EIA)   1000Vdc   10000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A103K2□H03□   X7R (EIA)   1000Vdc   10000pF±10%   5.5×4.0   3.15   5.0   K1   M1   RCER73A103K2□H03□   X7R (EIA)   1000Vdc   10000pF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER73A223K3□H03□   X7R (EIA)   1000Vdc   2000pF±10%   5.5×5.0   4.0   5.0   K1   M1   RCER73A683K5□H03□   X7R (EIA)   1000Vdc   4700pF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER73A683K5□H03□   X7R (EIA)   1000Vdc   6800pF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER73A683K5□H03□   X7R (EIA)   1000Vdc   6800pF±10%   7.5×5.5   4.0   5.0   K1   M1   RCER73A683K5□H03□   X7R (EIA)   1000Vdc   68000pF±10%   7.5×5.0   4.0   5.0   B1   E1   RCER73A683K5□H03□   X7R (EIA)	RCER72J153K2□□H03□	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J473K3□H03□         X7R (EIA)         630Vdc         47000pF±10%         5.5×5.0         4.0         5.0         K1         M1           RCER72J683K4□H03□         X7R (EIA)         630Vdc         68000pF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER72J104K4□H03□         X7R (EIA)         630Vdc         0.10µF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER72J154K5□H03□         X7R (EIA)         630Vdc         0.15µF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER72J224K5□H03□         X7R (EIA)         630Vdc         0.22µF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         630Vdc         0.47µF±20%         7.7×13.0         4.0         5.0         B1         E1           RCER73A152K2□H03□         X7R (EIA)         1000Vdc         1500pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A222K2□H03□         X7R (EIA)         1000Vdc         2200pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A682K2□H03□         X7R (EIA)         1000Vdc         6800pF±	RCER72J223K2□□H03□	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J683K4□H03□         X7R (EIA)         630Vdc         68000pF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER72J104K4□H03□         X7R (EIA)         630Vdc         0.10µF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER72J154K5□H03□         X7R (EIA)         630Vdc         0.15µF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER72J2474MU□H03□         X7R (EIA)         630Vdc         0.47µF±20%         7.7×13.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         1000Vdc         1000Pf±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A152K2□H03□         X7R (EIA)         1000Vdc         1500Pf±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A222K2□H03□         X7R (EIA)         1000Vdc         2200Pf±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A332K2□H03□         X7R (EIA)         1000Vdc         3300Pf±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A682K2□H03□         X7R (EIA)         1000Vdc         6800	RCER72J333K3□□H03□	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J104K4	RCER72J473K3□□H03□	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J154K5□H03□         X7R (EIA)         630Vdc         0.15µF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER72J224K5□H03□         X7R (EIA)         630Vdc         0.22µF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         630Vdc         0.47µF±20%         7.7×13.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         1000Vdc         1000P±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A152K2□H03□         X7R (EIA)         1000Vdc         2200PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A332K2□H03□         X7R (EIA)         1000Vdc         2300PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A472K2□H03□         X7R (EIA)         1000Vdc         4700PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A682K2□H03□         X7R (EIA)         1000Vdc         6800PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A153K3□H03□         X7R (EIA)         1000Vdc         5.5×4	RCER72J683K4□□H03□	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J224K5□H03□         X7R (EIA)         630Vdc         0.22μF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER72J474MU□H03□         X7R (EIA)         630Vdc         0.47μF±20%         7.7×13.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         1000Vdc         1000Pf±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A152K2□H03□         X7R (EIA)         1000Vdc         2200pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A222K2□H03□         X7R (EIA)         1000Vdc         2200pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A332K2□H03□         X7R (EIA)         1000Vdc         4700pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A472K2□H03□         X7R (EIA)         1000Vdc         6800pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A103K2□H03□         X7R (EIA)         1000Vdc         1000PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A223K3□H03□H03□         X7R (EIA)         1000Vdc <t< th=""><th>RCER72J104K4□□H03□</th><th>X7R (EIA)</th><th>630Vdc</th><th>0.10µF±10%</th><th>7.5×5.5</th><th>4.0</th><th>5.0</th><th>K1</th><th>M1</th></t<>	RCER72J104K4□□H03□	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J474MU□H03□         X7R (EIA)         630Vdc         0.47µF±20%         7.7×13.0         4.0         5.0         B1         E1           RCER73A102K2□H03□         X7R (EIA)         1000Vdc         1000PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A152K2□H03□         X7R (EIA)         1000Vdc         1500PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A222K2□H03□         X7R (EIA)         1000Vdc         2200PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A332K2□H03□         X7R (EIA)         1000Vdc         4700PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A682K2□H03□         X7R (EIA)         1000Vdc         6800PF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A103K2□H03□         X7R (EIA)         1000Vdc         1000P±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A153K3□H03□         X7R (EIA)         1000Vdc         15000P±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A223K3□H03□         X7R (EIA)         1000Vdc         2	RCER72J154K5□□H03□	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A102K2□H03□ X7R (EIA) 1000Vdc 1000pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A152K2□H03□ X7R (EIA) 1000Vdc 1500pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A222K2□H03□ X7R (EIA) 1000Vdc 2200pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A332K2□H03□ X7R (EIA) 1000Vdc 3300pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A472K2□H03□ X7R (EIA) 1000Vdc 4700pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A682K2□H03□ X7R (EIA) 1000Vdc 6800pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A103K2□H03□ X7R (EIA) 1000Vdc 6800pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A103K2□H03□ X7R (EIA) 1000Vdc 10000pF±10% 5.5×4.0 3.15 5.0 K1 M1 RCER73A153K3□H03□ X7R (EIA) 1000Vdc 15000pF±10% 5.5×5.0 4.0 5.0 K1 M1 RCER73A223K3□H03□ X7R (EIA) 1000Vdc 22000pF±10% 5.5×5.0 4.0 5.0 K1 M1 RCER73A333K4□H03□ X7R (EIA) 1000Vdc 33000pF±10% 5.5×5.0 4.0 5.0 K1 M1 RCER73A473K4□H03□ X7R (EIA) 1000Vdc 47000pF±10% 7.5×5.5 4.0 5.0 K1 M1 RCER73A683K5□H03□ X7R (EIA) 1000Vdc 68000pF±10% 7.5×5.5 4.0 5.0 B1 E1 RCER73A104K5□H03□ X7R (EIA) 1000Vdc 68000pF±10% 7.5×8.0 4.0 5.0 B1 E1	RCER72J224K5□□H03□	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A152K2□H03□         X7R (EIA)         1000Vdc         1500pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A222K2□H03□         X7R (EIA)         1000Vdc         2200pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A332K2□H03□         X7R (EIA)         1000Vdc         3300pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A472K2□H03□         X7R (EIA)         1000Vdc         4700pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A682K2□H03□         X7R (EIA)         1000Vdc         6800pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A103K2□H03□         X7R (EIA)         1000Vdc         15000pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A153K3□H03□         X7R (EIA)         1000Vdc         15000pF±10%         5.5×5.0         4.0         5.0         K1         M1           RCER73A333K4□H03□         X7R (EIA)         1000Vdc         33000pF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER73A683K5□H03□         X7R (EIA)         1000Vdc         <	RCER72J474MU□□H03□	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1
RCER73A222K2	RCER73A102K2□□H03□	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A332K2□H03□       X7R (EIA)       1000Vdc       3300pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A472K2□H03□       X7R (EIA)       1000Vdc       4700pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A682K2□H03□       X7R (EIA)       1000Vdc       6800pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A103K2□H03□       X7R (EIA)       1000Vdc       10000pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A153K3□H03□       X7R (EIA)       1000Vdc       15000pF±10%       5.5×5.0       4.0       5.0       K1       M1         RCER73A223K3□H03□       X7R (EIA)       1000Vdc       22000pF±10%       7.5×5.5       4.0       5.0       K1       M1         RCER73A473K4□H03□       X7R (EIA)       1000Vdc       47000pF±10%       7.5×5.5       4.0       5.0       K1       M1         RCER73A683K5□H03□       X7R (EIA)       1000Vdc       68000pF±10%       7.5×8.0       4.0       5.0       B1       E1         RCER73A104K5□H03□       X7R (EIA)       1000Vdc       0.10µF±10%       7.5×8.0       4.0       5.0       B1       E1 <th>RCER73A152K2□□H03□</th> <th>X7R (EIA)</th> <th>1000Vdc</th> <th>1500pF±10%</th> <th>5.5×4.0</th> <th>3.15</th> <th>5.0</th> <th>K1</th> <th>M1</th>	RCER73A152K2□□H03□	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A472K2□H03□       X7R (EIA)       1000Vdc       4700pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A682K2□H03□       X7R (EIA)       1000Vdc       6800pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A103K2□H03□       X7R (EIA)       1000Vdc       10000pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A153K3□H03□       X7R (EIA)       1000Vdc       15000pF±10%       5.5×5.0       4.0       5.0       K1       M1         RCER73A223K3□H03□       X7R (EIA)       1000Vdc       22000pF±10%       5.5×5.0       4.0       5.0       K1       M1         RCER73A333K4□H03□       X7R (EIA)       1000Vdc       33000pF±10%       7.5×5.5       4.0       5.0       K1       M1         RCER73A473K4□H03□       X7R (EIA)       1000Vdc       68000pF±10%       7.5×8.0       4.0       5.0       B1       E1         RCER73A104K5□H03□       X7R (EIA)       1000Vdc       0.10µF±10%       7.5×8.0       4.0       5.0       B1       E1	RCER73A222K2□□H03□	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A682K2□H03□       X7R (EIA)       1000Vdc       6800pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A103K2□H03□       X7R (EIA)       1000Vdc       10000pF±10%       5.5×4.0       3.15       5.0       K1       M1         RCER73A153K3□H03□       X7R (EIA)       1000Vdc       15000pF±10%       5.5×5.0       4.0       5.0       K1       M1         RCER73A223K3□H03□       X7R (EIA)       1000Vdc       22000pF±10%       5.5×5.0       4.0       5.0       K1       M1         RCER73A333K4□H03□       X7R (EIA)       1000Vdc       33000pF±10%       7.5×5.5       4.0       5.0       K1       M1         RCER73A473K4□H03□       X7R (EIA)       1000Vdc       68000pF±10%       7.5×8.0       4.0       5.0       B1       E1         RCER73A104K5□H03□       X7R (EIA)       1000Vdc       0.10µF±10%       7.5×8.0       4.0       5.0       B1       E1	RCER73A332K2□□H03□	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A103K2         HO3         X7R (EIA)         1000Vdc         10000pF±10%         5.5×4.0         3.15         5.0         K1         M1           RCER73A153K3         HO3         X7R (EIA)         1000Vdc         15000pF±10%         5.5×5.0         4.0         5.0         K1         M1           RCER73A223K3         HO3         X7R (EIA)         1000Vdc         22000pF±10%         5.5×5.0         4.0         5.0         K1         M1           RCER73A333K4         HO3         X7R (EIA)         1000Vdc         47000pF±10%         7.5×5.5         4.0         5.0         K1         M1           RCER73A683K5         HO3         X7R (EIA)         1000Vdc         68000pF±10%         7.5×8.0         4.0         5.0         B1         E1           RCER73A104K5         HO3         X7R (EIA)         1000Vdc         0.10µF±10%         7.5×8.0         4.0         5.0         B1         E1	RCER73A472K2□□H03□	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A153K3	RCER73A682K2□□H03□	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A223K3	RCER73A103K2□□H03□	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A333K4	RCER73A153K3□□H03□	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A473K4□□H03□       X7R (EIA)       1000Vdc       47000pF±10%       7.5×5.5       4.0       5.0       K1       M1         RCER73A683K5□□H03□       X7R (EIA)       1000Vdc       68000pF±10%       7.5×8.0       4.0       5.0       B1       E1         RCER73A104K5□□H03□       X7R (EIA)       1000Vdc       0.10µF±10%       7.5×8.0       4.0       5.0       B1       E1	RCER73A223K3□□H03□	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A683K5□H03□       X7R (EIA)       1000Vdc       68000pF±10%       7.5×8.0       4.0       5.0       B1       E1         RCER73A104K5□H03□       X7R (EIA)       1000Vdc       0.10µF±10%       7.5×8.0       4.0       5.0       B1       E1	RCER73A333K4□□H03□	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER73A104K5 □ H03 □ X7R (EIA) 1000Vdc 0.10μF±10% 7.5×8.0 4.0 5.0 B1 E1	RCER73A473K4□□H03□	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1
	RCER73A683K5□□H03□	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A224MU\ \tau\ \tau	RCER73A104K5□□H03□	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1
7.1. (2.1. y) 2000 100 0.00 DI DI	RCER73A224MU□□H03□	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

No.	AEC-Q200	) Test Item	Specifications	AEC-Q200 Test Method
		ost-Stress		neo quo reserrectiva
1	Electrical			-
	High Tem Exposure	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	
2		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h at
2		Q	30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	room condition*, then measure.
			C: Nominal Capacitance (pF)	
		I.R.	More than $1000M\Omega$ or $50M\Omega \cdot \mu F$ (Whichever is smaller)	
	Temperat Cycling	ture	The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	Perform the 1000 cycles according to the four heat treatments
2		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table. Let sit for 24±2h at room condition*, then measure.
3		Q	30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Step         1         2         3         4           Temp. (°C) -55+0/-3 Room Temp.         125+3/-0 Room Temp.           Time (min)         15±3         1         15±3         1
			C: Nominal Capacitance (pF)	
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	
	Moisture Resistance	ce	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.
		Appearance	No defects or abnormalities	Let sit for 24±2h at room condition*, then measure.  Humidity Humidity Humidity Humidity Humidity
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	(°C) 90-98% 80-98% 90-98% 80-98% 90-98% 65 65 65 66 70 65
4		Q	30pF ≤ C: Q ≥ 200 30pF > C: Q ≥ 100+10C/3	55 50 45 45 45 17 18 35 67 25 45 45 45 45 45 45 45 45 45 45 45 45 45
		I.R.	C: Nominal Capacitance (pF) $500M\Omega \text{ or } 25M\Omega \bullet \mu\text{F min. (Whichever is smaller)}$	0 1 2 3 4 5 6 7 8 9 10111213141516171819201222324  Hours
	Biased Hu	umidity	The measured and observed characteristics should satisfy the	
		Appearance	specifications in the following table.  No defects or abnormalities	
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Apply the rated voltage and DC1.3+0.2/-0V (add $100k\Omega$ resistor) at 85 $\pm$ 3°C and 80 to 85% humidity for $1000\pm12h$ .
5		Q	30pF ≤ C: Q ≥ 200 30pF > C: Q ≥ 100+10C/3	Remove and let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.
			C: Nominal Capacitance (pF)	
		I.R.	500M $\Omega$ or 25M $\Omega$ • μF min. (Whichever is smaller)	
	Operation	nal Life	The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	Apply the voltage shown in the table for 1000±12h at 125±3°C.
		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure.  The charge/discharge current is less than 50mA.
6		Q	30pF ≤ C: Q ≥ 350 10pF ≤ C < 30pF: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Rated Voltage Test Voltage  DC50V, DC100V 200% of the rated voltage  DC250V 150% of the rated voltage  DC630V, DC1kV 120% of the rated voltage
			C: Nominal Capacitance (pF)	
+ "	111	I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	

 $<sup>^{\</sup>star}$  "room condition"  $\,$  Temperature: 15 to 35 °C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

Continued from the preceding page.  $\searrow$ 

No	AEC-Q200	) Test Item	Specifications	AFC-0200 Test Method		
_			· ·	AEC-Q200 Test Method		
-7 	External \		No defects or abnormalities	Visual inspection		
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometers		
9	Marking		To be easily legible	Visual inspection		
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215		
		Capacitance	Within the specified tolerance	Solvent 1: 1 part (by volume) of isopropyl alcohol  3 parts (by volume) of mineral spirits		
10	Resistance	Q	30pF ≤ C: Q ≥ 1000 30pF > C: Q ≥ 400+20C	Solvent 2: Terpene defluxer		
	to Solvents		30pr > C. Q = 400+20C	Solvent 3: 42 parts (by volume) of water  1 part (by volume) of propylene glycol		
			C: Nominal Capacitance (pF)	monomethyl ether		
		I.R.	More than 10000M $\Omega$ or 500M $\Omega$ • $\mu F$ (Whichever is smaller)	1 part (by volume) of monoethanolamine		
		Appearance	No defects or abnormalities	Three shoots in each direction should be applied along		
		Capacitance	Within the specified tolerance	Three shocks in each direction should be applied along  3 mutually perpendicular axes of the test specimen (18 shocks).		
11	Mechanical Shock		30pF ≤ C:Q ≥ 1000	The specified test pulse should be Half-sine and should		
		Q	30pF > C : Q ≧ 400+20C	have a duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.		
			C : Nominal Capacitance (pF)			
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion		
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2000Hz.		
12	Vibration	-	30pF ≦ C: Q ≧ 1000	The frequency range, from 10 to 2000Hz and return to 10Hz,		
		Q	30pF > C: Q ≧ 400+20C	should be traversed in approximately 20min. This motion		
			C: Nominal Capacitance (pF)	should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).		
	Resistance	to.	The measured and observed characteristics should satisfy the			
	Soldering F		specifications in the following table.			
	(Non-Preheat)	Appearance	No defects or abnormalities			
13		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	The lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1s.  Post-treatment		
1		Dielectric		Capacitor should be stored for 24±2h at room condition*.		
		Strength (Between Terminals)	No defects			
	Resistance	to	The measured and observed characteristics should satisfy the			
	Soldering F	Heat	specifications in the following table.			
	(On-Preheat)	Appearance	No defects or abnormalities	First the capacitor should be stored at 120+0/-5°C for 60+0/-5		
13		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.		
_		Dielectric		Post-treatment Capacitor should be stored for 24±2h at room condition*.		
		Strength (Between	No defects			
		Terminals)				
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	Test condition		
	(soldering	Appearance	No defects or abnormalities	Temperature of iron-tip: 350±10°C		
13	iron method)	Capacitance		Soldering time: 3.5±0.5s Soldering position		
3		Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Straight Lead: 1.5 to 2.0mm from the root of terminal.		
		Dielectric Strength (Between Terminals)	No defects	Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Post-treatment Capacitor should be stored for 24±2h at room condition*.		
	Thermal Shock		The measured and observed characteristics should satisfy the specifications in the following table.			
	Appearance Capacitance Change		No defects or abnormalities	1		
				Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s).		
14			Within ±5% or ±0.5pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure.		
14		30pF ≤ C: Q ≥ 350	Step 1 2			
		Q	10pF ≤ C < 30p: Q ≥ 275+5C/2 10pF > C: Q ≥ 200+10C	Temp. (°C) -55+0/-3 125+3/-0 Time (min) 15±3 15±3		
			C: Nominal Capacitance (pF)	_		
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)			

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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	AEC-Q200	·	eding page. 🔏 Specifi	cations		C-Q200 Test Method	
		Appearance					
		Capacitance	Within the specified tolerance				
15	ESD	Q	30pF ≦ C: Q ≧ 1000 30pF > C: Q ≧ 400+20C		Per AEC-Q200-002		
		4	C: Nominal Capacitance (pF)				
		I.R.	More than $10000M\Omega$ or $500M\Omega$	⊋ • μF (Whichever is smaller)			
16	Solderabi	lity	Lead wire should be soldered wi direction over 95% of the circur		propotion). Immerse in solder solution for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.		
		Appearance	No defects or abnormalities		Visual inspection		
		Capacitance	Within the specified tolerance $30pF \le C: Q \ge 1000$		The capacitance, Q sho frequency and voltage s	uld be measured at 25°C at the shown in the table.	
		Q	30pF > C: Q ≥ 400+20C		Nominal Cap. C ≦ 1000pF	Frequency Voltage 1±0.1MHz AC0.5 to 5V (r.m.s.)	
			C: Nominal Capacitance (pF)	ı	C > 1000pF	1±0.1kHz AC1±0.2V (r.m.s.)	
		I.R.	Between Terminals	10000MΩ or 500MΩ • μF min. (Whichever is smaller)			
17	Electrical Charac- terization	Dielectric	Between Terminals	No defects or abnormalities	· ·		
		Strength	Strength		No defects or abnormalities	diameter so that each t approximately 2mm fro	e Test Voltage
18	Terminal Strength	Tensile Strength	l ermination not to be broken or loosened		gradually to each lead in	capacitor body, apply the force n the radial direction of the capacitor then keep the force applied for	
		Bending Strength	Termination not to be broken or loosened		Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.		

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No.	AEC-Q200 Test Item		Specifications	AEC-Q200	Test Method		
				The capacitance change should be measured after 5min at each specified temperature step.			
				Step	Temperature (°C)		
				1	25±2		
	Capacitance Temperature			2	-55±3		
		Char.	Temperature Coefficient	3 25±2			
		Char.	•	4	125±3		
19		COG	25 to 125°C: 0±30ppm/°C -55 to 25°C: 0+30/-72ppm/°C	5	25±2		
	Characteristics	U2J	25 to 125°C: -750±120ppm/°C -55 to 25°C: -750+120/-347ppm/°C	 •	3 as a reference. When cycling rom step 1 through 5 (-55 to ld be within the specified coefficient. lated by dividing the differences inimum measured values in the		

No.	AEC-Q200	) Test Item	Specifications	AEC-Q200 Test Method		
1	Pre-and P Electrical	ost-Stress Test		-		
	High Tem Exposure	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.			
		Appearance	No defects or abnormalities	Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h		
2		Capacitance Change	Within ±12.5%	<ul> <li>at room condition*, then measure.</li> <li>Pretreatment</li> <li>Perform the heat treatment at 150+0/-10°C for 60±5min</li> </ul>		
		D.F.	0.04 max.	and then let sit for 24±2h at room condition*.		
		I.R.	More than $1000 \text{M}\Omega$ or $50 \text{M}\Omega \cdot \mu\text{F}$ (Whichever is smaller)			
	Temperat Cycling	ure	The measured and observed characteristics should satisfy the specifications in the following table.	Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room condition*,		
		Appearance	No defects or abnormalities	then measure.		
3		Capacitance Change	Within ±12.5%	Step         1         2         3         4           Temp. (°C) -55+0/-3 Room Temp.         125+3/-0 Room Temp.           Time (min)         15±3         1         15±3         1		
		D.F.	0.05 max.	•Pretreatment		
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.		
	Moisture Resistanc	e	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.		
		Appearance	No defects or abnormalities	Let sit for 24±2h at room condition*, then measure.  •Pretreatment		
		Capacitance Change Within ±12.5%		Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.		
		D.F.	0.05 max.	Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 90-98% 80-98% 90-98%		
4		I.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)	70 66 60 55 50 44 94 94 94 95 33 0 10 10 10 10 10 10 10 10 10 10 10 10 1		
	Biased Hu	ımidity	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the rated voltage and DC1.3+0.2/-0V (add 100kΩ resistor)		
		Appearance	No defects or abnormalities	at 85±3°C and 80 to 85% humidity for 1000±12h.  Remove and let sit for 24±2h at room condition*, then measure.		
5		Capacitance Change	Within ±12.5%	The charge/discharge current is less than 50mA.  •Pretreatment  Preferm the heat treatment at 150.00/ 10%C for 60.5 min and		
		D.F.	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.		
	I.R.		500MΩ or 25MΩ • μF min. (Whichever is smaller)			

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200	) Test Item	Specifications	AEC-Q200	Test Method			
	Operational Life		The measured and observed characteristics should satisfy the specifications in the following table.	Let sit for 24±2h at room cond				
		Appearance	No defects or abnormalities	The charge/discharge current is less than 50mA.  •Pretreatment				
6		Capacitance Change	Within ±12.5%	Apply test voltage for 60±5min at test temperature.  Remove and let sit for 24±2h at room condition*.				
		D.F.	0.04 max.	Rated Voltage	Test Voltage			
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	DC25V, DC50V, DC100V DC250V DC630V DC1kV	200% of the rated voltage *1 150% of the rated voltage 120% of the rated voltage 110% of the rated voltage			
7	External \	/isual	No defects or abnormalities	Visual inspection				
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometers	 S			
9	Marking		To be easily legible	Visual inspection				
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215				
		Capacitance	Within the specified tolerance	Solvent 1: 1 part (by volume)	,			
	Resistance	D.F.	0.025 max.	<ul> <li>3 parts (by volume</li> <li>Solvent 2: Terpene defluxer</li> </ul>	) of mineral spirits			
10	to Solvents	I.R.	Rated Voltage: DC25V, DC50V, DC100V More than 10000MΩ or 500MΩ • μF (Whichever is smaller) Rated Voltage: DC250V, DC500V, DC630V, DC1kV More than 10000MΩ or 100MΩ • μF (Whichever is smaller)	Solvent 2: Terpene defluxer  Solvent 3: 42 parts (by volume) of water  1 part (by volume) of propylene glycol  monomethyl ether  1 part (by volume) of monoethanolamine				
		Appearance	No defects or abnormalities	Three shocks in each direction	should be applied along			
11	Mechanical	Capacitance	Within the specified tolerance		of the test specimen (18 shocks).			
11	Shock	D.F.	0.025 max.	The specified test pulse should be Half-sine and should have a duration: 0.5ms, peak value: 1500G and velocity ch.4.7m/s.				
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion				
		Capacitance	Within the specified tolerance		total amplitude of 1.5mm, the frequency being varied y between the approximate limits of 10 and 2000Hz.			
12	Vibration	D.F.	0.025 max.	The frequency range, from 10 t	to 2000Hz and return to 10Hz, mately 20min. This motion should			
	Resistance Soldering F		The measured and observed characteristics should satisfy the specifications in the following table.	The lead wires should be immersed in the melted solder 1.5 to				
	(Non-Preheat)	Appearance	No defects or abnormalities	2.0mm from the root of termin				
13		Capacitance Change	Within ±7.5%	Pre-treatment  Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement.				
1		Dielectric Strength (Between Terminals)	No defects	Post-treatment Capacitor should be stored for				
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	First the capacitor should be st	ored at 120+0/-5°C for 60+0/-5s			
	(On-Preheat)	Appearance	No defects or abnormalities		immersed in the melted solder 1.5			
13		Capacitance Change	Within ±7.5%	to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.  Pre-treatment  Capacitor should be stored at 150+0/-10°C for 1h, then place				
2		Dielectric Strength (Between Terminals)	No defects	room temperature for 24±2h l Post-treatment Capacitor should be stored for	pefore initial measurement.			

<sup>\*1:</sup> below parts are applicable in rated voltage×150%.

Char.	Rated Voltage	Capacitance	Dimensions
C7	1H	105	1
C7	1H	475	2
C7	1H	106	3
C7	1H	226	W
R7	2A	334	1
R7	2A	474-105	2
C7	2A	155-225	3
C7	2A	475	W

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No.	AEC-Q200	Test Item		Specifications	AEC-Q200 Test Method		
	Resistance Soldering F		The measured and obspecifications in the f	served characteristics should satisfy the ollowing table.	Test condition Temperature of iron-tip: 350±10°C		
	(Soldering Iron Method)	Appearance	No defects or abnorm	nalities	Soldering time: 3.5±0.5s. Soldering position Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend.		
13	·	Capacitance Change	Within ±7.5%				
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. Post-treatment Capacitor should be stored for 24±2h at room condition*.		
	Thermal S	Shock	The measured and ob specifications in the f	served characteristics should satisfy the ollowing table.	Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s).		
		Appearance	No defects or abnorm	nalities	Let sit for 24±2h at room condition*, then measure.		
14		Capacitance Change	Within ±12.5%		Step         1         2           Temp. (°C)         -55+0/-3         125+3/-0           Time (min)         15±3         15±3		
		D.F.	0.05 max.		-Pretreatment		
		I.R.	1000MΩ or 50MΩ • μ	F min. (Whichever is smaller)	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.		
		Appearance	No defects or abnorm	nalities			
		Capacitance	Within the specified t	olerance			
15	ESD	D.F.	0.025 max.		Per AEC-Q200-002		
13		I.R.	Rated Voltage: DC25	V, DC50V, DC100V Ω or 500MΩ • μF (Whichever is smaller) 0V, DC500V, DC630V, DC1kV Ω or 100MΩ • μF (Whichever is smaller)			
16	6 Solderability			oldered with uniform coating on the axial fthe circumferential direction.	Should be placed into steam aging for 8h±15min. The terminal of capacitor is dipped into a solution of ethanol (JIS K 8101) and rosin (JIS K 5902) (25% rosin in weight propotion). Immerse in solder solution for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.		
		Appearance	No defects or abnorm	nalities	Visual inspection		
		Capacitance	Within the specified t	olerance	The capacitance/D.F. should be measured at 25°C at the frequency and voltage shown in the table.		
		D.F.	0.025 max.		Nominal Cap.         Frequency         Voltage           C ≤ 10μF         1±0.1kHz         AC1.0±0.2V (r.m.s.)           C > 10μF         120±24kHz         AC0.5±0.1V (r.m.s.)		
		I.R.	Between Terminals	Rated Voltage: DC25V, DC50V, DC100V More than 10000MΩ or 500MΩ • μF (Whichever is smaller) Rated Voltage: DC250V, DC500V, DC630V, DC1kV More than 10000MΩ or 100MΩ • μF (Whichever is smaller)	The insulation resistance should be measured with a DC voltage shown in the table at 25°C within 2min of charging.  Rated Voltage Measuring Voltage DC25V, DC50V, DC100V, DC250V Rated Voltage DC630V, DC1kV DC500V		
17	Electrical Charac- terization	Dielectric	Between Terminals	No defects or abnormalities	The capacitor should not be damaged when DC voltage shown in the table is applied between the terminations for 1 to 5s.  (Charge/Discharge current ≤ 50mA.)  Rated Voltage Test Voltage  DC25V, DC50V, DC100V 250% of the rated voltage  DC250V 200% of the rated voltage  DC630V 150% of the rated voltage  DC1kV 120% of the rated voltage		
		Strength	Body Insulation	No defects or abnormalities	The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit is kept approximately 2mm from the balls, and 250% of the rated DC voltage shown in the table is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA.)    Rated Voltage   Test Voltage     DC25V, DC50V, DC100V   250% of the rated voltage     DC250V   200% of the rated voltage     DC630V, DC1kV   DC1300V		

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method	d		
18	Terminal Strength	Tensile Strength	Termination not to be broken or loosened	As in the figure, fix the capacitor body, apply gradually to each lead in the radial direction until reaching 10N and then keep the force 10±1s.	of the capacitor		
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.			
				The capacitance change should be measured after 5min at each specified temperature step.			
				Step Temp	erature (°C)		
				1	25±2		
				2	-55±3		
					25±2		
	Capacitar		Char. X7R: Within ±15%		125±3		
19			Char. X7S: Within ±22%	5	25±2		
	Characteristics			The ranges of capacitance change compared with the above 25°C value over the temperature ranges shown in the table should be within the specified ranges.  •Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*. Perform the initial measurement.			

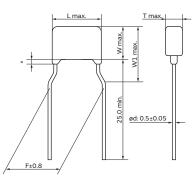
 $<sup>{\</sup>rm *`"room\ condition"}\ \ {\rm Temperature:15\ to\ 35°C,Relative\ humidity:45\ to\ 75\%,Atmosphere\ pressure:86\ to\ 106kPa}$ 

# 150°C Operation Leaded MLCC for Automotive

## **■** RHE Series (DC25V-DC100V)

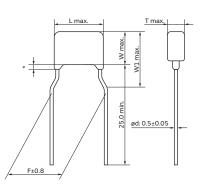
#### **Features**

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Applied maximum temperature up to 150°C Note: Maximum accumulative time to 150°C is within 2000 hours.
- 4. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 5. Meet LF (Lead Free) and HF (Halogen Free)
- 6. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 7. If copper wire is necessary at welding process, copper wire is available based on request.





- Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

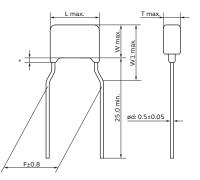


Dimensions code: 1 Lead style code: K1

Dimensions code: 2

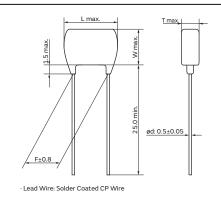
Lead style code: K1

- \* Coating extension does not exceed the end of the lead bend · Lead Wire: Solder Coated CP Wire
  - (in mm)



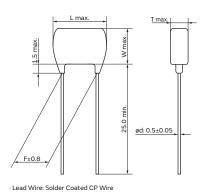
\* Coating extension does not exceed the end of the lead bend Lead Wire: Solder Coated CP Wire



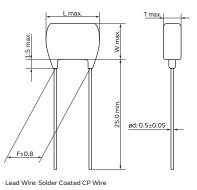


(in mm)

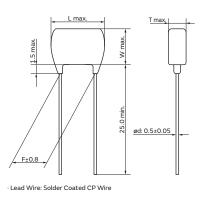




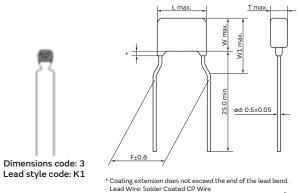




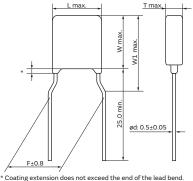




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Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire (in mm)

### **Dimensions**

Dimensions and		Dimensions (mm)								
Lead Style Code	L	W	W1	Т	F	d				
0A2/0DB	3.6	3.5	-		2.5	0.5				
0K1/0M1	3.6	3.5	6.0		5.0	0.5				
1A2/1DB	4.0	3.5	-		2.5	0.5				
1K1/1M1	4.0	3.5	5.0		5.0	0.5				
2A2/2DB	5.5	4.0	-	See the individual product specification	2.5	0.5				
2K1/2M1	5.5	4.0	6.0	product specification	5.0	0.5				
3A2/3DB	5.5	5.0	-		2.5	0.5				
3K1/3M1	5.5	5.0	7.5		5.0	0.5				
WK1/WM1	5.5	7.5	10.0		5.0	0.5				

#### Marking

riaiking					
Туре	Temperature Compensating Type	High Dielectric	Constant Type		
Rated Voltage	DC50V, DC100V	DC25V, DC50V	DC100V		
Dimensions Code Temp. Char.	X8G	Xt	BL		
0	8	8	8		
1	102J	\104K	\103K		
2	_	(M 105 K58	(M 224 K18		
3, W	_	(M) 335 K58	_		
Temperature Characteristics	Marked with code (X8G, X8L cha	r.: 8)			
Nominal Capacitance	Marked with 3 figures				
Capacitance Tolerance	Marked with code				
Rated Voltage	Marked with code (DC25V: 2, DC50V: 5, DC100V: 1) A part is omitted (Please refer to the marking example.)				
Manufacturer's Identification	Marked with M A part is omitted (Please refer to	the marking example.)			

## **■** Temperature Compensating Type, X8G Characteristics

Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
	Char.	Voltage		(mm)	(mm)	(mm)	Bulk	Taping
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H121J0 H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H121J0 H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H182J0 H03	X8G (Murata)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H182J0 H03	X8G (Murata)	50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H222J0 H03	X8G (Murata)	50Vdc	2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H222J0 H03	X8G (Murata)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H332J0 H03	X8G (Murata)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H332J0 H03	X8G (Murata)	50Vdc	3300pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H392J0 H03	X8G (Murata)	50Vdc	3900pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H392J0 H03	X8G (Murata)	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H472J1 H03	X8G (Murata)	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H472J1 H03	X8G (Murata)	50Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H562J1 H03	X8G (Murata)	50Vdc	5600pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H562J1 H03	X8G (Murata)	50Vdc	5600pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H682J1 H03	X8G (Murata)	50Vdc	6800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H682J1 H03	X8G (Murata)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H822J1 H03	X8G (Murata)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H822J1 H03	X8G (Murata)	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G1H103J1□□H03□	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H103J1□□H03□	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A151J0 H03	X8G (Murata)	100Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB

Continued from the preceding page.

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code Bulk	Lead Style Code
RHE5G2A151J0□□H03□	X8G (Murata)	100Vdc	150pF±5%	(mm) 3.6×3.5	(mm) 2.5	(mm) 5.0	K1	Taping M1
RHE5G2A181J0□□H03□	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A181J0 H03	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A221J0□□H03□	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A221J0□□H03□	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A271J0 H03	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A271J0 H03	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A331J0□□H03□	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A331J0 H03	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A391J0 H03	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A391J0 H03	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A471J0□□H03□	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A471J0□□H03□	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A561J0□□H03□	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A561J0□□H03□	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A681J0□□H03□	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A681J0□□H03□	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A821J0□□H03□	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A821J0□□H03□	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A102J0□□H03□	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A102J0□□H03□	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A122J0□□H03□	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A122J0□□H03□	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A152J0□□H03□	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A152J0□□H03□	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A182J1□□H03□	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A182J1□□H03□	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A222J1□□H03□	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A222J1□□H03□	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A272J1□□H03□	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A272J1□□H03□	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A332J1□□H03□	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G2A332J1□□H03□	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHEL81E104K0 H03	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E104K0 H03	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E224K0□□H03□	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E224K0□□H03□	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E334K1□□H03□	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E334K1□□H03□	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E474K1□□H03□	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E474K1□□H03□	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E684K1□□H03□	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E684K1□□H03□	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E105K1□□H03□	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E105K1 H03	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E155K2□□H03□	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81E155K2□□H03□	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E225K2 H03	X8L (Murata)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

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Continued from the preceding page. \( \)  Temp   Pated   Dimensions   Dimension   Lead Space   Lead Style   L									
Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW	T	F F	Code Bulk	Code	
RHEL81E225K2 H03	X8L (Murata)	25Vdc	2.2µF±10%	(mm) 5.5×4.0	(mm) 3.15	(mm) 5.0	K1	Taping M1	
RHEL81E335K2 HO3	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81E335K2 H03	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81E475K2 H03	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81E475K2□□H03□	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81E106K3 H03	X8L (Murata)	25Vdc	10μF±10%	5.5×5.0	4.0	2.5	A2	DB	
RHEL81E106K3 H03	X8L (Murata)	25Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1	
RHEL81E226MW□□H03□	X8L (Murata)	25Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1	
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H331K0 H03	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H331K0□□H03□	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H471K0□□H03□	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H471K0 H03	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H681K0□□H03□	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H681K0□□H03□	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H102K0□□H03□	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H102K0 H03	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H472K0 H03	X8L (Murata)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB M1	
RHEL81H472K0□□H03□ RHEL81H682K0□□H03□	X8L (Murata)	50Vdc 50Vdc	4700pF±10% 6800pF±10%	3.6×3.5 3.6×3.5	2.5	5.0 2.5	K1 A2	M1 DB	
RHEL81H682K0 H03	X8L (Murata)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H153K0 H03	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H153K0 H03	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H223K0□□H03□	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H223K0□□H03□	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H333K0 H03	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H333K0□□H03□	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H473K0□□H03□	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H473K0□□H03□	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H683K0□□H03□	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H683K0 H03	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H104K0 H03	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H104K0 H03	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H154K1 H03	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL81H154K1 H03	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL81H224K1 H03	X8L (Murata)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL81H224K1 H03	X8L (Murata)	50Vdc 50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0 2.5	K1	M1 DB	
RHEL81H334K1	X8L (Murata) X8L (Murata)	50Vdc	0.33µF±10% 0.33µF±10%	4.0×3.5 4.0×3.5	2.5	5.0	A2 K1	M1	
RHEL81H474K2   H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81H474K2   H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81H684K2   H03	X8L (Murata)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81H684K2   H03	X8L (Murata)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81H105K2 H03	X8L (Murata)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81H105K2 H03	X8L (Murata)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81H155K2□□H03□	X8L (Murata)	50Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81H155K2□□H03□	X8L (Murata)	50Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81H225K2□□H03□	X8L (Murata)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB	

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Continued from the preceding pe	Temp Dated Dimensions Dimension Lead Space Lead Style Lead Sty								
Part Number	Temp. Char.	Rated Voltage	Capacitance	LxW (mm)	T (mm)	F (mm)	Code Bulk	Lead Style Code Taping	
RHEL81H225K2 H03	X8L (Murata)	_ (Murata) 50Vdc 2.2µF±10%		5.5×4.0	3.15	5.0	K1	M1	
RHEL81H335K3 H03	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	A2	DB	
RHEL81H335K3□□H03□	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1	
RHEL81H475K3 H03	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB	
RHEL81H475K3□□H03□	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1	
RHEL81H106MW□□H03□	X8L (Murata)	50Vdc	10μF±20%	5.5×7.5	4.0	5.0	K1	M1	
RHEL82A221K0 H03	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A221K0□□H03□	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A331K0 H03	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A331K0□□H03□	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A681K0 H03	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A681K0□□H03□	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A102K0□□H03□	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A102K0□□H03□	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A152K0□□H03□	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A152K0□□H03□	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A222K0□□H03□	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A222K0□□H03□	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A332K0□□H03□	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A332K0□□H03□	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A472K0□□H03□	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A472K0□□H03□	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A682K0□□H03□	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A682K0□□H03□	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A223K0□□H03□	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL82A223K0□□H03□	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL82A333K1 H03	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL82A333K1□□H03□	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL82A683K1 H03	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL82A683K1 H03	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL82A104K1 H03	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL82A104K1 H03	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL82A154K2 H03	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL82A154K2 H03	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL82A224K2 H03	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL82A224K2 H03	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1	

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)  $\,$ 

## Specifications and Test Methods

	Specification			cation				
No.	AEC-Q200	) Test Item	Temperature Compensating Type (Char. X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method			
1	Pre-and Post-Stress Electrical Test			-				
	High Tem Exposure		The measured and observed characteristics should satisfy the specifications in the following table.					
		Appearance	No defects or abnormalities		Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h at room condition*, then measure.			
2		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Within ±12.5%	Pretreatment     Perform the heat treatment at 150+0/-10°C for 60±5min and			
		Q/D.F.	Q ≧ 350	0.04 max.	then let sit for 24±2h at room condition*. (for Char. X8L)			
		I.R.	More than $1000 \text{M}\Omega$ or $50 \text{M}\Omega$ • $\mu$	uF (Whichever is smaller)				
	Temperature Cycling		The measured and observed characteristics should satisfy the specifications in the following table.		Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room			
		Appearance	No defects or abnormalities exc coating	ept color change of outer	condition*, then measure.  Step 1 2 3 4			
3		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Temp. (°C)         -55+0/-3         Room Temp.         150+3/-0         Room Temp.           Time (min)         15±3         1         15±3         1			
		Q/D.F.	Q ≧ 350	0.05 max.	Pretreatment  Perform the heat treatment at 150+0/-10°C for 60±5min and			
		I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)	then let sit for 24±2h at room condition*. (for Char. X8L)			
	Moisture Resistanc	:e	The measured and observed cha specifications in the following ta	,	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.			
		Appearance	No defects or abnormalities		Let sit for 24±2h at room condition*, then measure.  •Pretreatment			
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*. (for Char. X8L)			
		Q/D.F.	Q ≧ 200	0.05 max.	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 90-98% 90-98% 90-98%			
4	I.R.		500MΩ or 25MΩ • μF min. (Whichever is smaller)		65 66 67 58 40 40 40 40 40 40 40 40 40 40			
	Biased Humidity		The measured and observed characteristics should satisfy the specifications in the following table.		Apply the rated voltage and DC1.3+0.2/-0V (add $100k\Omega$ resis at $85\pm3^{\circ}$ C and $80$ to $85\%$ humidity for $1000\pm12$ h.			
		Appearance No defects or abnormalities			Remove and let sit for 24±2h at room condition*, then measure.			
5		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	The charge/discharge current is less than 50mA.  •Pretreatment			
		Q/D.F.	Q ≧ 200	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and			
		I.R.	500MΩ or 25MΩ • μF min. (Whice	chever is smaller)	then let sit for 24±2h at room condition*. (for Char. X8L)			
	Operational Life		The measured and observed characteristics should satisfy the specifications in the following table.		Apply 150% of the rated voltage for 1000±12h at 150±3°C.			
		Appearance	No defects or abnormalities except color change of outer coating		Let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.			
6		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Within ±12.5%	•Pretreatment Apply test voltage for 60±5 min at test temperature.			
		Q/D.F.	Q ≧ 350	0.04 max.	Remove and let sit for 24±2h at room condition*.  (for Char. X8L)			
		I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)	, , ,			
7	External Visual No defects or abnormalities		Visual inspection					
8	B Physical Dimension Within the specified dimensions			·	Using calipers and micrometers			
9	Marking To be easily legible				Visual inspection			

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

Continued on the following page. 🖊

## Specifications and Test Methods

Continued from the preceding page.

			Specif	ication				
10.	AEC-Q200	Test Item	Temperature Compensating Type (Char. X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method			
		Appearance	No defects or abnormalities		Per MIL-STD-202 Method 215			
10		Capacitance	Within the specified tolerance		Solvent 1: 1 part (by volume) of isopropyl alcohol 3 parts (by volume) of mineral spirits			
	Resistance	Q/D.F.	Q ≧ 1000	0.025 max.	Solvent 2: Terpene defluxer			
.0	to Solvents	I.R.	More than 10000M $\Omega$ or 500M $\Omega$	2 • μF (Whichever is smaller)	Solvent 3: 42 parts (by volume) of water 1 part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine			
11		Appearance	No defects or abnormalities		Three shocks in each direction should be applied along 3			
	Mechanical	Capacitance	Within the specified tolerance		mutually perpendicular axes of the test specimen (18 shocks).  The specified test pulse should be Half-sine and should			
	Shock	Q/D.F.	Q ≧ 1000	0.025 max.	have a duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.			
		Appearance	No defects or abnormalities		The capacitor should be subjected to a simple harmonic motion			
		Capacitance	Within the specified tolerance		having a total amplitude of 1.5mm, the frequency being varied			
L2	Vibration	Q/D.F.			uniformly between the approximate limits of 10 and 2000Hz. The frequency range, from 10 to 2000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicula directions (total of 36 times).			
	Resistance		The measured and observed cha	•				
13 ' 1	Soldering Heat (Non-Preheat)		specifications in the following to	able.	The lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1s.			
		Appearance	No defects or abnormalities		- Pre-treatment			
		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement.  (For Char. X8L)			
		Dielectric Strength (Between Terminals)	No defects		Post-treatment Capacitor should be stored for 24±2h at room condition*.			
	Resistance to Soldering Heat		The measured and observed chaspecifications in the following to	,	First the capacitor should be stored at 120+0/-5°C for 60+0/-5 Then, the lead wires should be immersed in the melted solder 1 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.			
	(On-Preheat)	Appearance	No defects or abnormalities					
		Capacitance	Within ±2.5% or ±0.25pF	Within ±7.5%	Pre-treatment			
2		Change	(Whichever is larger)		Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. (For			
	Dielectric Strength (Between Terminals)		No defects		Char. X8L) Post-treatment Capacitor should be stored for 24±2h at room condition*.			
	Resistance Soldering F		The measured and observed chaspecifications in the following to	,	Test condition Temperature of iron-tip: 350±10°C Soldering time: 3.5±0.5s. Soldering position			
	(Soldering Iron Method)	Appearance	No defects or abnormalities					
.3	mon riculou)	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend.			
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. (For Char. X8L) Post-treatment Capacitor should be stored for 24±2h at room condition*.			
	Thermal Shock		The measured and observed chaspecifications in the following ta	,	Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s).			
		Appearance No defects or abnormalities			Let sit for 24±2h at room condition*, then measure.			
L4		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Step         1         2           Temp. (°C)         -55+0/-3         150+3/-0           Time (mix)         15,2         15,2			
		Q/D.F.	Q ≧ 350	0.05 max.	Time (min) 15±3 15±3			
		I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)	<ul> <li>Pretreatment</li> <li>Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*. (for Char. X8L)</li> </ul>			
		Appearance	No defects or abnormalities					
		Capacitance	Within the specified tolerance		Per AEC-Q200-002			
15	ESD -	0 / D F	0 > 1000	0.005				
13		Q/D.F.	Q ≧ 1000	0.025 max.				

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

Continued on the following page. 🖊

## Specifications and Test Methods

Continued from the preceding page.

Con	Continued from the preceding page.									
				Specif						
No.	AEC-Q200	Test Item	remperature co	mpensating Type . X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method				
16	Solderabi	lity	Lead wire should be soldered with uniform coating on the axial direction over 95% of the circumferential direction.			The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25%rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.  Temp. of solder:  245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu) 235±5°C H60A or H63A Eutectic Solder				
		Appearance	No defects or a	hnormalities		Visual inspection	—			
		Capacitance		cified tolerance		The capacitance, Q/D.F. should be measured at 25°C at the	—			
		Q/D.F.	Q ≧ 1000		0.025 max.		  )			
		Insulation Resistance	Room Temperature	10000MΩ or 5 (Whichever is s	00MΩ • μF min. :maller)	The insulation resistance should be measured at 25±3°C with DC voltage not exceeding the rated voltage at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA.)	.h a			
17	Electrical Charac-	(I.R.)	High Temperature	100MΩ or 5MΩ (Whichever is s	•	The insulation resistance should be measured at 150±3°C with a DC voltage not exceeding the rated voltage at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA.)				
	terization		Between Terminals	No defects or a	abnormalities	The capacitor should not be damaged when DC voltage of 300% of the rated voltage (for Char. X8G) or DC voltage of 250% of the rated voltage (for Char. X8L) is applied between the terminations for 1 to 5s. (Charge/Discharge current ≤ 50mA.)	ก			
		Dielectric Strength	Body Insulation	No defects or a	abnormalities	The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit is kept approximately 2mm from the balls, and 250% of the rated DC voltage is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA.)				
18	Terminal	Tensile Strength	Termination no	to be broken or loosened		As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.				
	Strength	Bending Strength	Termination no	ot to be broken or	rloosened	Each lead wire should be subjected to a force of 2.5N and the be bent 90° at the point of egress in one direction. Each wire then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.				
19	Capacitance 19 Temperature Characteristics		emperature X8G 0±30ppm/°C		Within ±15% (Temp. Range: -55 to +125°C) Within +15/-40% (Temp. Range: +125 to +150°C)	5 25±2	<b>1</b>			

 $<sup>^{*}</sup>$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa



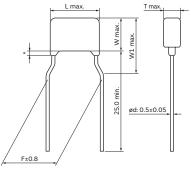
## 175°C/200°C Operation Leaded MLCC for Automotive

## RHS Series (DC100V-DC500V)

#### **Features**

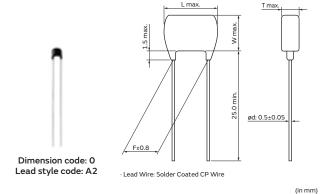
- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Applied maximum temperature up to 175°C or 200°C Note: Maximum accumulative time is within 2000 hours.
- 4. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 5. Meet LF (Lead Free) and HF (Halogen Free)
- 6. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 7. If copper wire is necessary at welding process, copper wire is available based on request.



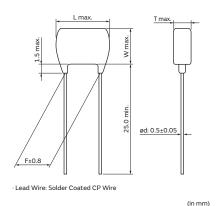


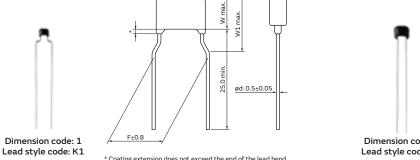
- Coating extension does not exceed the end of the lead bend.
- Lead Wire: Solder Coated CP Wire

(in mm)



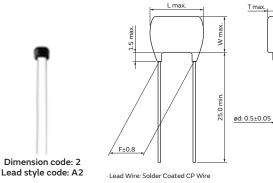




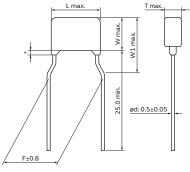


\* Coating extension does not exceed the end of the lead bend.

Lead Wire: Solder Coated CP Wire







- \* Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

#### **Dimensions**

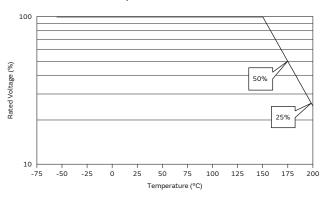
Dimensions and	Dimensions (mm)						
Lead Style Code	L	W	W1	Т	F	d	
0A2/0DG	3.8	3.5	-		2.5	0.5	
0K1/0M2	3.8	3.5	6.0		5.0	0.5	
1A2/1DG	4.0	3.5	-	See the individual	2.5	0.5	
1K1/1M2	4.0	3.5	5.0	product specification	5.0	0.5	
2A2/2DG	5.5	4.0	-		2.5	0.5	
2K1/2M1	5.5	4.0	6.0		5.0	0.5	

#### **Rated Voltage**

When the product temperature exceeds 150°C, please use this product within the voltage and temperature derated conditions in the figure below.

Maximum operating temperature

200°C: Temp. Char. CCG and UNJ 175°C: Temp. Char. XAL and XAN



#### Marking

Rated Voltage		DC100V		DC200V	DC500V			
Dimension Code Temp. Char.	CCG	XAL	XAN	UNJ				
0	4		9	_	_			
1		_	103K	(101J)	_			
2			© 224 K19	(M103) J62	(M 101) J92			
Temperature Characteristics	Marked with code (Co	CG Char.: 4, UNJ Char.	: 2, XAL Char.: 6, XAN (	Char.: 9)				
Nominal Capacitance	Marked with 3 figures	5						
Capacitance Tolerance	Marked with code							
Rated Voltage	,	Marked with code (DC100V: 1, DC200V: 6, DC500V: 9)  Apart is omitted (Please refer to the marking example.)						
Manufacturer's Identification	Marked with M A part is omitted (Ple	ase refer to the markir	ng example.)					

# **■** Temperature Compensating Type, CCG/UNJ Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHS7G2A101J0 H01	CCG (Murata)	100Vdc	100pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A101J0 H01	CCG (Murata)	100Vdc	100pF±5%	3.8×3.5	2.5	5.0	K1	M2
RHS7G2A121J0 H01	CCG (Murata)	100Vdc	120pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A121J0 H01	CCG (Murata)	100Vdc	120pF±5%	3.8×3.5	2.5	5.0	K1	M2
RHS7G2A151J0 H01	CCG (Murata)	100Vdc	150pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A151J0 H01	CCG (Murata)	100Vdc	150pF±5%	3.8×3.5	2.5	5.0	K1	M2
RHS7G2A181J0 H01	CCG (Murata)	100Vdc	180pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A181J0 H01	CCG (Murata)	100Vdc	180pF±5%	3.8×3.5	2.5	5.0	K1	M2
RHS7G2A221J0 H01	CCG (Murata)	100Vdc	220pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A221J0 H01	CCG (Murata)	100Vdc	220pF±5%	3.8×3.5	2.5	5.0	K1	M2
RHS7G2A271J0□□H01□	CCG (Murata)	100Vdc	270pF±5%	3.8×3.5	2.5	2.5	A2	DG
RHS7G2A271J0 H01	CCG (Murata)	100Vdc	270pF±5%	3.8×3.5	2.5	5.0	K1	M2

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RHS7G2A331J0□□H01□	CCG (Murata)	100Vdc	330pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A331J0□□H01□	CCG (Murata)	100Vdc	330pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A391J0□□H01□	CCG (Murata)	100Vdc	390pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A391J0□□H01□	CCG (Murata)	100Vdc	390pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A471J0□□H01□	CCG (Murata)	100Vdc	470pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A471J0 H01	CCG (Murata)	100Vdc	470pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A561J0 H01	CCG (Murata)	100Vdc	560pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A561J0 H01	CCG (Murata)	100Vdc	560pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A681J0□□H01□	CCG (Murata)	100Vdc	680pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A681J0□□H01□	CCG (Murata)	100Vdc	680pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A821J0□□H01□	CCG (Murata)	100Vdc	820pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A821J0□□H01□	CCG (Murata)	100Vdc	820pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A102J0□□H01□	CCG (Murata)	100Vdc	1000pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A102J0□□H01□	CCG (Murata)	100Vdc	1000pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A152J0□□H01□	CCG (Murata)	100Vdc	1500pF±5%	3.8×3.5	2.5	2.5	A2	DG		
RHS7G2A152J0□□H01□	CCG (Murata)	100Vdc	1500pF±5%	3.8×3.5	2.5	5.0	K1	M2		
RHS7G2A222J1□□H01□	CCG (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7G2A222J1□□H01□	CCG (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7G2A272J1□□H01□	CCG (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7G2A272J1□□H01□	CCG (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7G2A332J1□□H01□	CCG (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7G2A332J1 H01	CCG (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D101J1 H01	UNJ (Murata)	200Vdc	100pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D101J1 H01	UNJ (Murata)	200Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D151J1 H01	UNJ (Murata)	200Vdc	150pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D151J1 H01	UNJ (Murata)	200Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D221J1 H01	UNJ (Murata)	200Vdc	220pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D221J1 H01	UNJ (Murata)	200Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D331J1 H01	UNJ (Murata)	200Vdc	330pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D331J1 H01	UNJ (Murata)	200Vdc 200Vdc	330pF±5%	4.0×3.5 4.0×3.5	2.5	5.0 2.5	K1 A2	M2 DG		
RHS7J2D471J1 H01 RHS7J2D471J1 H01	UNJ (Murata) UNJ (Murata)	200Vdc	470pF±5% 470pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D681J1 H01	UNJ (Murata)	200Vdc	680pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D681J1 H01	UNJ (Murata)	200Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D102J1 H01	UNJ (Murata)	200Vdc	1000pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D102J1 H01	UNJ (Murata)	200Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D152J1 H01	UNJ (Murata)	200Vdc	1500pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D152J1	UNJ (Murata)	200Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D222J1 H01	UNJ (Murata)	200Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D222J1□□H01□	UNJ (Murata)	200Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D332J1 H01	UNJ (Murata)	200Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D332J1□□H01□	UNJ (Murata)	200Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D472J1□□H01□	UNJ (Murata)	200Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DG		
RHS7J2D472J1□□H01□	UNJ (Murata)	200Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M2		
RHS7J2D682J2□□H01□	UNJ (Murata)	200Vdc	6800pF±5%	5.5×4.0	3.15	2.5	A2	DG		
RHS7J2D682J2□□H01□	UNJ (Murata)	200Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2D103J2 H01	UNJ (Murata)	200Vdc	10000pF±5%	5.5×4.0	3.15	2.5	A2	DG		
RHS7J2D103J2 H01	UNJ (Murata)	200Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H101J2 H01	UNJ (Murata)	500Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H151J2 H01	UNJ (Murata)	500Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H221J2□□H01□	UNJ (Murata)	500Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H331J2□□H01□	UNJ (Murata)	500Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H471J2□□H01□	UNJ (Murata)	500Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H681J2□□H01□	UNJ (Murata)	500Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H102J2 H01	UNJ (Murata)	500Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H152J2 H01	UNJ (Murata)	500Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M2		
RHS7J2H222J2 H01	UNJ (Murata)	500Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M2		

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHS7J2H332J2□□H01□	UNJ (Murata)	500Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M2
RHS7J2H472J2□□H01□	UNJ (Murata)	500Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M2

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

### ■ High Dielectric Constant Type, XAL/XAN Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHSL12A472K0□□H01□	XAL (Murata)	100Vdc	4700pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A472K0□□H01□	XAL (Murata)	100Vdc	4700pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A682K0□□H01□	XAL (Murata)	100Vdc	6800pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A682K0□□H01□	XAL (Murata)	100Vdc	6800pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A103K0□□H01□	XAL (Murata)	100Vdc	10000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A103K0□□H01□	XAL (Murata)	100Vdc	10000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A153K0□□H01□	XAL (Murata)	100Vdc	15000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A153K0□□H01□	XAL (Murata)	100Vdc	15000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A223K0□□H01□	XAL (Murata)	100Vdc	22000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A223K0 H01	XAL (Murata)	100Vdc	22000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A333K0□□H01□	XAL (Murata)	100Vdc	33000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A333K0□□H01□	XAL (Murata)	100Vdc	33000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A473K0□□H01□	XAL (Murata)	100Vdc	47000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A473K0□□H01□	XAL (Murata)	100Vdc	47000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A683K0□□H01□	XAL (Murata)	100Vdc	68000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A683K0□□H01□	XAL (Murata)	100Vdc	68000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSL12A104K0□□H01□	XAL (Murata)	100Vdc	0.1µF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSL12A104K0□□H01□	XAL (Murata)	100Vdc	0.1µF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A472K0□□H01□	XAN (Murata)	100Vdc	4700pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSN12A472K0□□H01□	XAN (Murata)	100Vdc	4700pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A682K0□□H01□	XAN (Murata)	100Vdc	6800pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSN12A682K0□□H01□	XAN (Murata)	100Vdc	6800pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A103K0□□H01□	XAN (Murata)	100Vdc	10000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSN12A103K0□□H01□	XAN (Murata)	100Vdc	10000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A153K0□□H01□	XAN (Murata)	100Vdc	15000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSN12A153K0□□H01□	XAN (Murata)	100Vdc	15000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A223K0□□H01□	XAN (Murata)	100Vdc	22000pF±10%	3.8×3.5	2.5	2.5	A2	DG
RHSN12A223K0□□H01□	XAN (Murata)	100Vdc	22000pF±10%	3.8×3.5	2.5	5.0	K1	M2
RHSN12A333K1□□H01□	XAN (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DG
RHSN12A333K1□□H01□	XAN (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M2
RHSN12A473K1□□H01□	XAN (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DG
RHSN12A473K1□□H01□	XAN (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M2
RHSN12A683K1□□H01□	XAN (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DG
RHSN12A683K1□□H01□	XAN (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M2
RHSN12A104K1□□H01□	XAN (Murata)	100Vdc	0.1µF±10%	4.0×3.5	2.5	2.5	A2	DG
RHSN12A104K1□□H01□	XAN (Murata)	100Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M2
RHSN12A154K2□□H01□	XAN (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DG
RHSN12A154K2□□H01□	XAN (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M2
RHSN12A224K2□□H01□	XAN (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DG
RHSN12A224K2□□H01□	XAN (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M2

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

### Temperature Compensating Type Specifications and Test Methods

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method			
1	Pre-and Pe			-			
	High	Appearance	No defects or abnormalities except color change of outer coating				
2	Temperature Exposure	Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Sit the capacitor for 1000±12h at 200±5°C. Let sit for 24±2h at room condition*, then measure.			
	(Storage)	Q	Q ≧ 350				
		I.R.	1000MΩ min.				
		Appearance	No defects or abnormalities except color change of outer coating	Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room condition*,			
3	Temperature Cycling	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	then measure.  Step 1 2 3 4			
		Q	Q ≧ 350	Temp. (°C) -55+0/-3 Room Temp. 125+3/-0 Room Temp.			
		I.R.	1000MΩ min.				
		Appearance	No defects or abnormalities	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%)			
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	treatment shown below, 10 consecutive times.  Let sit for 24±2h at room condition*, then measure.			
		Q	Q ≧ 200	Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 90-98% 80-98% 90-98% 90-98%			
4	Moisture Resistance	l.R.	500MΩ min.	65 60 55 50 45 40 835 830 625 525 535 630 630 630 630 630 630 630 630			
		Appearance	No defects or abnormalities				
5	Biased Humidity	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Apply the rated voltage and DC1.3+0.2/-0 V (add $100k\Omega$ resistor) at $85\pm3^{\circ}$ C and $80$ to $85\%$ humidity for $1000\pm12h$ .  Remove and let sit for $24\pm2h$ at room condition*, then measure.			
	,	Q	Q ≧ 200	The charge/discharge current is less than 50mA.			
		I.R.	500MΩ min.				
		Appearance	No defects or abnormalities except color change of outer coating				
6	Operational Life	Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Apply 25% of the rated voltage for 1000±12h at 200±5°C.  Let sit for 24±2h at room condition*, then measure  The charge/discharge current is less than 50mA.			
		Q	Q ≧ 350				
		I.R.	1000MΩ min.				
7	External \	/isual	No defects or abnormalities	Visual inspection			
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometers			
9	Marking		To be easily legible	Visual inspection			
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215 Solvent 1: 1 part (by volume) of isopropyl alcohol			
		Capacitance	Within the specified tolerance	3 parts (by volume) of mineral spirits			
10	Resistance	Q	Q ≧ 1000	Solvent 2: Terpene defluxer			
	to Solvents	I.R.	10000MΩ min.	Solvent 3: 42 parts (by volume) of water 1part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine			
		Appearance	No defects or abnormalities	Three shocks in each direction should be applied along			
11	Mechanical	Capacitance	Within the specified tolerance	3 mutually perpendicular axes of the test specimen (18 shocks).  The specified test pulse should be Half-sine and should have a			
	Shock	Q	Q ≧ 1000	duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.			

 $<sup>^*\ &</sup>quot;room\ condition"\ \ Temperature:\ 15\ to\ 35\ ^\circ\text{C},\ Relative\ humidity:\ 45\ to\ 75\%,\ Atmosphere\ pressure:\ 86\ to\ 106\ kPa$ 

Continued on the following page.  ${\cal P}$ 

### Temperature Compensating Type Specifications and Test Methods

Continued from the preceding page.

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method			
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion			
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2000Hz.			
12	Vibration	Q	Q ≧ 1000	The frequency range, from 10 to 2000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).			
		Appearance	No defects or abnormalities				
13	Resistance to	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	The lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1s.			
1	Soldering Heat (Non-Preheat)	Dielectric Strength (Between Terminals)	No defects	Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		Appearance	No defects or abnormalities				
13	Resistance to Soldering Heat (On-Preheat)	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	First the capacitor should be stored at 120+0/-5°C for 60+0/-5s Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s. Post-treatment Capacitor should be stored for 24±2h at room condition*.			
2		Dielectric Strength (Between Terminals)	No defects				
		Appearance	No defects or abnormalities	Test condition			
13	Resistance to Soldering Heat	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Termperature of iron-tip: 350±10°C Soldering time: 3.5±0.5s. Soldering position			
3	(soldering iron method)	Dielectric Strength (Between Terminals)	No defects	Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		Appearance	No defects or abnormalities	Perform the 300 cycles according to the two heat treatments			
14	Thermal	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table (Maximum transfer time is 20s).  Let sit for 24±2h at room condition*, then measure.			
	Shock	Q	Q ≧ 350	Step 1 2 Temp. (°C) -55+0/-3 200+5/-0			
		I.R.	1000M $\Omega$ min.	Time (min) 15±3 15±3			
		Appearance	No defects or abnormalities				
15	ESD	Capacitance	Within the specified tolerance	Per AEC-Q200-002			
15	E3D	Q	Q ≧ 1000	Per AEC-Q200-002			
		I.R.	$10000M\Omega$ min.				
16	Solderabil	olderability  Lead wire should be soldered with uniform coating on the axial direction over 95% of the circumferential direction.		The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.  Temp. of solder:  245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)			

 $<sup>^*\ \</sup>hbox{``room condition''}\ \ \ \text{Temperature: 15 to 35°C, Relative humidity: 45 to 75\%, Atmosphere pressure: 86 to 106 kPa}$ 

Continued on the following page.  $\nearrow$ 

### Temperature Compensating Type Specifications and Test Methods

Continued from the preceding page.  $\searrow$ 

No.	AEC-Q200	Test Item	Specifi	ıcations	AEC-Q20	0 Test Method	
		Appearance	No defects or abnormalities		Visual inspection		
		Capacitance	Within the specified tolerance		The capacitance, Q should be frequency and voltage shown		
		Q	Q ≧ 1000		C < 1000pF 1±0	quency Voltage 0.1MHz AC0.5 to 5V (r.m.s.) 0.1kHz AC1±0.2V (r.m.s.)	
			Room Temperature	10000MΩ min.	The insulation resistance shot DC voltage not exceeding the temperature and humidity an (Charge/Discharge current §	d within 2min of charging.	
		I.R.	High Temperature	20MΩ min.			
17	Electrical Charac- terization		Between Terminals	No defects or abnormalities	The capacitor should not be dapplied between the terminal (Charge/Discharge current ≤ STATE PROPERTY OF THE PROPERTY OF T		
		Dielectric Strength	Body Insulation	No defects or abnormalities	The capacitor is placed in a cometal balls of 1mm diameter terminal, short-circuit, is kept 2mm from the balls as shown and voltage in table is impresset between capacitor terminals metal balls.  (Charge/Discharge current ≤ 1	so that each approximately in the figure, sed for 1 to 5s and	
					Rated Voltage DC100V, DC200V DC500V	Test Voltage 250% of the rated voltage 150% of the rated voltage	
18	Terminal Strength	l lermination not to be broken or loo		r loosened	until reaching 10N and then k	tor body, apply the force radial direction of the capacitor seep the force applied for 10±1s.	
		Bending Strength			Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.		
					The capacitance change shoul each specified temperature s	uld be measured after 5min at tep.	
			Within the specified Tolerance		Step 1	Temperature (°C) 25±2	
				rature Coefficient	2	-55±3 25±2	
	Canacita	200	Char. Tempe -55 to 25°C: 0+30	rature Coefficient 0/-72ppm/°C	4	200±5	
19	Capacitar Temperat		CCG 25 to 125°C: 0±30		5	25±2	
13	Characte		125 to 200°C: 0+7	72/-30ppm/°C	The temperature coefficient i	s determind using the	
			125 to 200°C: 0+72/-30ppm/°C  -55 to 25°C: -750+120/-347ppm/°C  UNJ 25 to 125°C: -750±120ppm/°C  125 to 200°C: -750+347/-120ppm/°C		capacitance measured in step 3 as a reference. When cycling the temperature sequentially from step 1 through 5 (-55 to +200°C) the capacitance should be within the specified tolerance for the temperature coefficient.  The capacitance drift is caluculated by dividing the differences		
					betweeen the maximum and step 1, 3 and 5 by the capacit	minimum measured values in the cance value in step 3.	

### High Dielectric Constant Type Specifications and Test Methods

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method			
1	Pre-and P	ost-Stress	·	-			
	Electrical	Appearance	No defects or abnormalities except color change of outer coating				
2	High Temperature	Capacitance Change	Within ±12.5%	Sit the capacitor for 1000±12h at 175±5°C. Let sit for 24±2h at room condition*, then measure.  •Pretreatment			
_	Exposure (Storage)	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.04 max.	Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.			
		I.R.	1000M $\Omega$ or 50M $\Omega$ • μF min. (Whichever is smaller)				
		Appearance	No defects or abnormalities except color change of outer coating	Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room condition*,			
3	Temperature	Capacitance Change	Within ±12.5%	then measure.  Step 1 2 3 4			
3	Cycling	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.05 max.	Temp. (°C)         -55+0/-3         Room Temp.         175+5/-0         Room Temp.           Time (min)         15±3         1         15±3         1			
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.			
		Appearance	No defects or abnormalities	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.			
		Capacitance Change	Within ±12.5%	Let sit for 24±2h at room condition*, then measure.  Humidity Humidity Humidity Humidity Humidity			
	Moisture Resistance	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.05 max.	(°C) 90-98% 80-98% 90-98% 80-98% 90-98% 70 65 65 60 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			
4		l.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)	0 1 2 3 4 5 6 7 8 9 10111213141516171819202122324  Hours			
		Appearance	No defects or abnormalities	<ul> <li>Pretreatment         Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.     </li> <li>Apply the rated voltage and DC1.3+0.2/-0 V (add 100kΩ resisted)</li> </ul>			
5	Biased	Capacitance Change	Within ±12.5%	at 85±3°C and 80 to 85% humidity for 1000±12h.  Remove and let sit for 24±2h at room condition*, then measure.  The charge/discharge current is less than 50mA.			
3	Humidity	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.05 max.	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let			
		I.R.	500M $\Omega$ or 25M $\Omega$ • μF min. (Whichever is smaller)	sit for 24±2h at room condition*.			
		Appearance	No defects or abnormalities except color change of outer coating	Apply 50% of the rated voltage for 1000±12h at 175±5°C.			
6	Operational Life	Capacitance Change	Within ±15%	Let sit for 24±2h at room condition*, then measure.  The charge/discharge current is less than 50mA.  •Pretreatment			
		D.F.	Char. XAL: 0.075 max. Char. XAN: 0.04 max.	Apply test voltage for 60±5min at test temperature.  Remove and let sit for 24±2h at room condition*.			
		I.R.	100MΩ or 5MΩ • μF min. (Whichever is smaller)				
7	External \		No defects or abnormalities	Visual inspection			
8	Physical I	Dimension	Within the specified dimensions	Using calipers and micrometers			
9	Marking		To be easily legible	Visual inspection			
		Appearance		Per MIL-STD-202 Method 215 Solvent 1: 1 part (by volume) of isopropyl alcohol			
		Capacitance	Within the specified tolerance	3 parts (by volume) of mineral spirits			
10	Resistance to Solvents	I) F		Solvent 2: Terpene defluxer Solvent 3: 42 parts (by volume) of water  1 part (by volume) of propylene glycol			
		I.R.	10000MΩ or 500MΩ • μF min. (Whichever is smaller)	1part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine			

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

### High Dielectric Constant Type Specifications and Test Methods

Continued from the preceding page.

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method			
		Appearance	No defects or abnormalities	Three shocks in each direction should be applied along 3			
11	Mechanical	Capacitance	Within the specified tolerance	mutually perpendicular axes of the test specimen (18 shocks).			
	Shock	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.025 max.	The specified test pulse should be Half-sine and should have a duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.			
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion			
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2000Hz.			
12	Vibration	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.025 max.	The frequency range, from 10 to 2000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).			
		Appearance	No defects or abnormalities	The lead wires should be immersed in the melted solder 1.5 to			
13	Resistance to	Capacitance Change	Within ±7.5%	2.0mm from the root of terminal at 260±5°C for 10±1s. •Pretreatment			
1	Soldering Heat (Non-Preheat)	Dielectric Strength (Between Terminals)	No defects	Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.  •Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		Appearance	No defects or abnormalities	First the capacitor should be stored at 120+0/-5°C for 60+0/-5s			
13	Resistance to	Capacitance Change	Within ±7.5%	Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.			
2	Joider IIIg i Icat	Dielectric Strength (Between Terminals)	No defects	<ul> <li>Pretreatment         Perform the heat treatment at 150+0/-10°C for 1h and the let sit for 24±2h at room condition*.     </li> <li>Post-treatment         Capacitor should be stored for 24±2h at room condition*.     </li> </ul>			
		Appearance	No defects or abnormalities	Test condition			
		Capacitance Change	Within ±7.5%	Termperature of iron-tip: 350±10°C Soldering time: 3.5±0.5s Soldering position			
13	Resistance to Soldering Heat (Soldering Iron Method)	Dielectric Strength (Between Terminals)	No defects	Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. •Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*. •Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		Appearance	No defects or abnormalities	Perform the 300 cycles according to the two heat treatments			
		Capacitance Change	Within ±12.5%	listed in the following table (Maximum transfer time is 20s). Let sit for 24±2h at room condition*, then measure.			
14	Thermal	D.F.	Char. XAL: 0.075 max.	Step 1 2			
14	Shock		Char. XAN: 0.05 max.	Temp. (°C) -55+0/-3 175+5/-0 Time (min) 15±3 15±3			
		I.R.	1000MΩ or 50MΩ • μF min. (Whichever is smaller)	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.			
		Appearance	No defects or abnormalities				
		Capacitance	Within the specified tolerance				
15	ESD	D.F.	Char. XAL: 0.075 max. Char. XAN: 0.025 max.	Per AEC-Q200-002			
		I.R.	10000MΩ or 500MΩ • μF min. (Whichever is smaller)				
16	Solderabil	lity	Lead wire should be soldered with uniform coating on the axial direction over 95% of the circumferential direction.	The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.			
			perature: 15 to 35°C Relative humidity: 45 to 75% Atmosphere n	Temp. of solder: 245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)			

 $<sup>^{\</sup>star}\ \text{``room condition''}\ \ \text{Temperature: 15 to 35°C, Relative humidity: 45 to 75\%, Atmosphere pressure: 86 to 106 kPa}$ 

Continued on the following page.  $\nearrow$ 

### High Dielectric Constant Type Specifications and Test Methods

No.	AEC-Q200	Test Item		Specifications	AEC-Q200 Te	est Method		
		Appearance	No defects or abnorm	nalities	Visual inspection			
		Capacitance	Within the specified to	olerance	The capacitance, D.F. should be n	neasured at 25°C at the		
		D.F.	Char. XAL: 0.075 max Char. XAN: 0.025 max	<del></del>	frequency and voltage shown in the table.  Frequency Voltage  1±0.1kHz AC1±0.2V (r.m.s.)			
		I.R.	Room Temperature	10000MΩ or 500MΩ • μF min. (Whichever is smaller)	The insulation resistance should b DC voltage not exceeding the rat temperature and humidity and w (Charge/Discharge current ≤ 50m	ed voltage at normal ithin 2min of charging.		
17	Electrical Charac- terization	i.R.	High Temperature $ \begin{array}{c} 10M\Omega \text{ or } 0.5M\Omega \bullet \mu\text{F min.} \\ \text{(Whichever is smaller)} \end{array} $		a DC voltage not exceeding 50% temperature and humidity and w	The insulation resistance should be measured at 175±5°C with a DC voltage not exceeding 50% of the rated voltage at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA)		
		Dielectric Strength	Between Terminals	No defects or abnormalities	The capacitor should not be dam: 250% of the rated voltage is app for 1 to 5s. (Charge/Discharge current ≦ 50m	lied between the terminations		
			Body Insulation	No defects or abnormalities	The capacitor is placed in a conta metal balls of 1mm diameter so t terminal, short-circuit, is kept app 2mm from the balls as shown in t and 250% of the rated DC voltag impressed for 1 to 5s between caterminals and metal balls.  (Charge/Discharge current ≦ 50m	that each proximately the figure, the is Approx. 2mm pacitor		
18	Terminal Strength	Tensile Strength	Termination not to be	broken or loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.			
		Bending Strength			Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.			
					The capacitance change should be each specified temperature step.			
19	Capacitar Temperat Character	ure	Within the specified Tolerance  Char. Capacitance Change  XAL -55 to 150°C: Within ±15% 150 to 175°C: Within+15/-40%  XAN -55 to 125°C: Within ±15% 125 to 175°C: Within+15/-60%		Step  1 2 3 4 5 The ranges of capacitance change	•		
					25°C value over the temperature ranges shown in the table should be within the specified ranges.  •Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*. Perform the initial measurement.			

 $<sup>{\</sup>rm *"room\ condition"}\ \ {\rm Temperature:\ 15\ to\ 35°C,\ Relative\ humidity:\ 45\ to\ 75\%,\ Atmosphere\ pressure:\ 86\ to\ 106kPa}$ 

# Leaded MLCC for General Purpose

# ■ RDE Series (DC25V-DC1kV)

#### **Features**

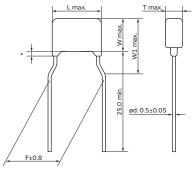
- 1. Small size and large capacitance
- 2. Low ESR characteristics for high frequency
- 3. Meet LF (Lead Free) and HF (Halogen Free)
- 4. Flow soldering is available, but re-flow soldering is not available.

#### **Applications**

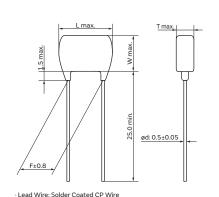
General electronic equipment

(Do not use for automotive-related power train and safety equipment.)



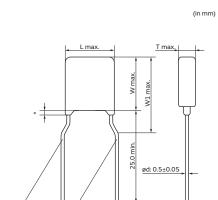


Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire



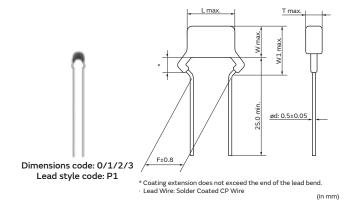
Dimensions code: 5 Lead style code: B1

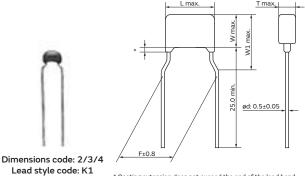
Dimensions code: W Lead style code: K1



Coating extension does not exceed the end of the lead bend.

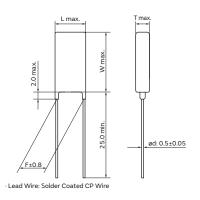
Lead Wire: Solder Coated CP Wire





Coating extension does not exceed the end of the lead bend Lead Wire: Solder Coated CP Wire





(in mm)

#### **Dimensions**

Dimensions and				Dimensions (mm)						
Lead Style Code	L	W	W1	Т	F	d				
0P1/0S1	5.0	3.5	6.0		2.5	0.5				
0K1/0M1	4.0	3.5	6.0		5.0	0.5				
1P1/1S1	5.0	3.5	5.0		2.5	0.5				
1K1/1M1	4.5	3.5	5.0		5.0	0.5				
2P1/2S1	5.5	4.0	6.0		2.5	0.5				
2K1/2M1	5.5	4.0	6.0	See the individual	5.0	0.5				
3P1/3S1	5.5	5.0	7.5	product specification	2.5	0.5				
3K1/3M1	5.5	5.0	7.5		5.0	0.5				
4K1/4M1	7.5	5.5	8.0		5.0	0.5				
5B1/5E1	7.5	7.5*	-		5.0	0.5				
UB1/UE1	7.7	12.5*	-		5.0	0.5				
WK1/WM1	5.5	7.5	10.0		5.0	0.5				

\*DC630V, DC1kV: W+0.5mm

(in mm)

### Marking

Marking												
Rated Voltage	DC2	5V	С	0C50V			DC100V		DC250V	DC500V	DC630V	DC1kV
Dimensions Temp. Code Char.	X7S	X7R	COG	X7S	X7R	COG	X7S	X7R		X7R, U	2J, C0G	
0		(104K)		-			-		-		-	-
1	224K	-	A 102J	-	224K	A 102J	-	224K	(U2J) (U2J) (D2K) (X7R)	(X7R)	-	-
2	(€ 475 K2C)	-	© 563 J5A	(€,475) (€,475)	(%) 105 K5C	(M) 103 J1A	-	(105) K1C	(U2J) (U2J) (W473) (K4C) (X7R) (X7R) (C0G)	(X7R)	(U2J) (U2J) (U2J) (X7R) (X7R) (X7R)	(U2J)  (U2J)  (U2J)  (W102  (X7R)  (X7R)  (COG)
3, 4, W	(№226 K2C)	-	-	(M226 K5C)	(M335) K5C	-	(M225 K1C)	-	(U2J) (U2J) (W2Z4 K4C (X7R)	(X7R)	(V2J) (U2J) (H104 (K7C) (X7R)	(U2J) (W333 (X7R)
5, U	-	-	-	-	-	-	-	-	- (M 474 K4C (X7R)	(X7R)	(U2J)  (U2J)  (W474  M7C  (X7R)	(U2J)  (W4)  (U2J)  (W4)  (W7R)
Temperature Characteristics				A, X7S/X7 to the ma			U)					
Nominal Capacitance	Under 10	0pF: Actu	al value 1	.00pF and	over: Mark	ed with 3 f	igures					
Capacitance Tolerance	Marked v		lease refer	to the ma	rking exam	nple.)						
Rated Voltage		Marked with code (DC25V: 2, DC50V: 5, DC100V: 1, DC250V: 4, DC500V: 9, DC630V: 7, DC1kV: A) A part is omitted (Please refer to the marking example.)										
Manufacturer's Identification	Marked v A part is		lease refer	to the ma	rking exam	nple.)						

# **■** Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H5R0C0□□H03□	COG (EIA)	50Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1

Continued from the preceding pa	Continued from the preceding page. 🕽										
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping			
RDE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H6R0D0□□H03□	COG (EIA)	50Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H7R0D0□□H03□	COG (EIA)	50Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H8R0D0□□H03□	COG (EIA)	50Vdc	8.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H9R0D0□□H03□	COG (EIA)	50Vdc	9.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H330J0□□H03□	COG (EIA)	50Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H390J0□□H03□	COG (EIA)	50Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H470J0□□H03□	COG (EIA)	50Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H470J0□□H03□	COG (EIA)	50Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H680J0   H03	COG (EIA)	50Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H680J0   H03	COG (EIA)	50Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H820J0□□H03□	COG (EIA)	50Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H151J0   H03	COG (EIA)	50Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H151J0   H03	COG (EIA)	50Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H181J0   H03	COG (EIA)	50Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H391J0□□H03□	COG (EIA)	50Vdc	390pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1			
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1			
RDE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1			

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H152J0□□H03□	COG (EIA)	50Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H152J0□□H03□	COG (EIA)	50Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H222J0□□H03□	COG (EIA)	50Vdc	2200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H332J0□□H03□	COG (EIA)	50Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H332J0□□H03□	COG (EIA)	50Vdc	3300pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H392J0□□H03□	COG (EIA)	50Vdc	3900pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H392J0□□H03□	COG (EIA)	50Vdc	3900pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H472J1□□H03□	COG (EIA)	50Vdc	4700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H103J1 H03	COG (EIA)	50Vdc	10000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H223J1 H03	COG (EIA)	50Vdc	22000pF±5% 22000pF±5%	4.5×3.5 5.0×3.5	3.15 3.15	5.0 2.5	K1 P1	M1 S1
RDE5C1H223J1	COG (EIA)	50Vdc	27000pF±5%	5.0×3.5 5.5×4.0	3.15	5.0		
RDE5C1H273J2 H03 RDE5C1H273J2 H03	COG (EIA)	50Vdc 50Vdc	27000pF±5% 27000pF±5%	5.5×4.0	3.15	2.5	K1 P1	M1 S1
RDE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H333J2 H03	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H563J2	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H563J2 H03	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H683J2□□H03□	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H683J2□□H03□	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H823J2□□H03□	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H823J2□□H03□	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H104J2 H03	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H104J2 H03	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A1R0C0 H03	COG (EIA)	100Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A1R0C0□□H03□	COG (EIA)	100Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A2R0C0□□H03□	COG (EIA)	100Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A2R0C0 H03	COG (EIA)	100Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A3R0C0□□H03□	COG (EIA)	100Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A3R0C0 H03	COG (EIA)	100Vdc	3.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A4R0C0 H03	COG (EIA)	100Vdc	4.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A4R0C0□□H03□	COG (EIA)	100Vdc	4.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A6R0D0 H03	` '	100Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A6R0D0 H03	COG (EIA)	100Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A7R0D0 H03	COG (EIA)	100Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A7R0D0 H03	COG (EIA)	100Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A8RODO H03	COG (EIA)	100Vdc	8.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A8RODO H03	COG (EIA)	100Vdc	8.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A9RODO H03	COG (EIA)	100Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A9RODO HO3	COG (EIA)	100Vdc	9.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A100J0 H03	COG (EIA)	100Vdc	10pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A120J0 H03	COG (EIA)	100Vdc	12pr ±5 % 12pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1
	COG (EIA)				2.5	5.0	K1	M1
RDE5C2A180J0 H03	·	100Vdc	18pF±5%	4.0×3.5				
RDE5C2A330 IO HO3	COG (EIA)	100Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A390J0 H03	COG (EIA)	100Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A470J0 H03	COG (EIA)	100Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A391J0 H03	COG (EIA)	100Vdc	390pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A391J0 H03	COG (EIA)	100Vdc	390pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A561J0□□H03□	COG (EIA)	100Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A681J0□□H03□	COG (EIA)	100Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A681J0□□H03□	COG (EIA)	100Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A821J0□□H03□	COG (EIA)	100Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A102J0□□H03□	COG (EIA)	100Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A122J0□□H03□	COG (EIA)	100Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A122J0□□H03□	COG (EIA)	100Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A222J1□□H03□	COG (EIA)	100Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A222J1□□H03□	COG (EIA)	100Vdc	2200pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A272J1□□H03□	COG (EIA)	100Vdc	2700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A272J1□□H03□	COG (EIA)	100Vdc	2700pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A682J2 H03	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A822J2 H03 RDE5C2A103J2 H03	COG (EIA)	100Vdc 100Vdc	8200pF±5% 10000pF±5%	5.5×4.0 5.5×4.0	3.15	2.5 5.0	P1 K1	S1 M1
RDE5C2A103J2 H03	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A123J2 H03	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A123J2 H03	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A153J2 H03	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A153J2 H03	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A183J2 H03	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A183J2□□H03□	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A223J2 H03	COG (EIA)	100Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A223J2 H03	COG (EIA)	100Vdc	22000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2E100J2 H03	COG (EIA)	250Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E120J2 H03	COG (EIA)	250Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E150J2 H03	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E180J2 H03	COG (EIA)	250Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E220J2 H03	COG (EIA)	250Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E270J2 H03	COG (EIA)	250Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E330J2 H03	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E390J2 H03	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E470J2 H03	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E560J2 H03	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E680J2 H03	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E820J2 H03	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E101J2 H03	COG (EIA)	250Vdc 250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1 M1
RDE5C2E121J2 H03 RDE5C2E151J2 H03	COG (EIA)	250Vdc	120pF±5% 150pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1 K1	M1
RDE5C2E181J2 H03	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E221J2	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E271J2 H03	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E331J2 H03	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E391J2 H03	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E471J2 H03	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RDE5C2E681J2□□H03□	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E821J2 H03	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E102J2 H03	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E122J2 H03	COG (EIA)	250Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E152J2 H03	COG (EIA)	250Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E182J2 H03	COG (EIA)	250Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E222J2 H03	COG (EIA)	250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E272J2 H03	COG (EIA)	250Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E332J2 H03	COG (EIA)	250Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E392J2 H03	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E472J2 H03	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1		
	·	250Vdc 250Vdc		5.5×4.0	3.15	5.0		M1		
RDE5C2E682J2 H03	COG (EIA)	250Vdc	6800pF±5%		3.15		K1			
RDE5C2E822J2 H03	COG (EIA)		8200pF±5%	5.5×4.0		5.0	K1	M1		
RDE5C2E103J2 H03	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E123J2 H03	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2E153J2 H03	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J270J2 H03	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J390J2 H03	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J470J2 H03	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J560J2 H03	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J680J2 H03	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J221J2 H03	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J271J2 H03	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J331J2 H03	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J391J2□□H03□	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J471J2 H03	COG (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J561J2 H03	COG (EIA)	630Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J681J2 H03	COG (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J821J2 H03	COG (EIA)	630Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J102J2 H03	COG (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J122J2 H03	COG (EIA)	630Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J152J2□□H03□	COG (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J182J2□□H03□	COG (EIA)	630Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J222J2□□H03□	COG (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J272J2□□H03□	COG (EIA)	630Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C2J332J2□□H03□	COG (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A100J2 H03	COG (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A120J2 H03	COG (EIA)	1000Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A150J2 H03	COG (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A180J2 H03	COG (EIA)	1000Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A220J2 H03	COG (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A270J2□□H03□	COG (EIA)	1000Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A330J2□□H03□	COG (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A390J2 H03	COG (EIA)	1000Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1		
RDE5C3A470J2 H03	COG (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1		
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping			
RDE5C3A560J2 H03	COG (EIA)	1000Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A680J2□□H03□	COG (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A820J2 H03	COG (EIA)	1000Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A101J2 H03	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A121J2 H03	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A151J2 H03	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A181J2 H03	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A221J2 H03	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A271J2 H03	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A331J2 H03	COG (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A391J2 H03	COG (EIA)	1000Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A471J2 H03	COG (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A561J2 H03	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A681J2 H03	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A821J2 H03	COG (EIA)	1000Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE5C3A102J2 H03	COG (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E101J1 H03	U2J (EIA)	250Vdc	1000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E151J1 H03	· , ,	250Vdc 250Vdc		4.5×3.5 4.5×3.5		5.0	K1	M1			
	U2J (EIA)		150pF±5% 220pF±5%		3.15						
RDE7U2E221J1 H03 RDE7U2E331J1 H03	U2J (EIA) U2J (EIA)	250Vdc 250Vdc	330pF±5%	4.5×3.5 4.5×3.5	3.15 3.15	5.0 5.0	K1 K1	M1 M1			
	` '		'								
RDE7U2E471J1 H03	U2J (EIA)	250Vdc 250Vdc	470pF±5%	4.5×3.5	3.15	5.0	K1	M1 M1			
RDE7U2E681J1 H03	U2J (EIA)		680pF±5%	4.5×3.5	3.15	5.0	K1				
RDE7U2E102J1 H03	U2J (EIA)	250Vdc	1000pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E152J1 H03	U2J (EIA)	250Vdc	1500pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E222J1 H03	U2J (EIA)	250Vdc 250Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1			
RDE7U2E332J1  H03	U2J (EIA)	250Vdc	3300pF±5%	4.5×3.5 4.5×3.5	3.15 3.15	5.0	K1 K1	M1			
RDE7U2E472J1 H03	U2J (EIA)	250Vdc	4700pF±5%	4.5×3.5 5.5×4.0	3.15	5.0 5.0	K1	M1 M1			
RDE7U2E682J2 H03 RDE7U2E103J2 H03	U2J (EIA)	250Vdc	6800pF±5% 10000pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E153J2 H03	U2J (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E223J2 H03	U2J (EIA)	250Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2E333J3 H03	·	250Vdc	33000pF±5%	5.5×5.0	4.0	5.0	K1	M1			
	U2J (EIA)		47000pF±5%								
RDE7U2E473J3	U2J (EIA)	250Vdc 630Vdc	10pF±5%	5.5×5.0 5.5×4.0	4.0 3.15	5.0 5.0	K1 K1	M1 M1			
RDE7U2J100J2 H03 RDE7U2J150J2 H03	U2J (EIA)	630Vdc		5.5×4.0	3.15	5.0	K1	M1			
	` ′		15pF±5%								
RDE7U2J220J2 H03 RDE7U2J330J2 H03	U2J (EIA) U2J (EIA)	630Vdc 630Vdc	22pF±5% 33pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1 K1	M1 M1			
	U2J (EIA)	630Vdc	•		3.15	5.0	K1	M1			
RDE7U2J470J2 H03	` ′		47pF±5%	5.5×4.0							
RDE7U2J680J2 H03	U2J (EIA)	630Vdc 630Vdc	68pF±5%	5.5×4.0	3.15 3.15	5.0	K1 K1	M1 M1			
RDE7U2J101J2 H03	` ′		100pF±5%	5.5×4.0							
RDE7U2J151J2 H03 RDE7U2J221J2 H03	U2J (EIA)	630Vdc 630Vdc	150pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1 K1	M1 M1			
	U2J (EIA)		220pF±5%								
RDE7U2J331J2 H03	U2J (EIA)	630Vdc 630Vdc	330pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1	M1 M1			
RDE7U2J471J2 H03	U2J (EIA)		470pF±5%				K1	M1			
RDE7U2J681J2	U2J (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1				
RDE7U2J102J2 H03	U2J (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J152J2 H03	U2J (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J222J2 H03	U2J (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1			
RDE7U2J332J2 H03 RDE7U2J472J2 H03	U2J (EIA)	630Vdc 630Vdc	3300pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1	M1 M1			
	U2J (EIA)		4700pF±5%				K1				
RDE7U2J682J3 H03	U2J (EIA)	630Vdc	6800pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2J103J3 H03	U2J (EIA)	630Vdc	10000pF±5%	5.5×5.0	4.0	5.0	K1	M1			
RDE7U2J153J4 H03	U2J (EIA)	630Vdc	15000pF±5%	7.5×5.5	4.0	5.0	K1	M1			
RDE7U2J223J4 H03	U2J (EIA)	630Vdc	22000pF±5%	7.5×5.5	4.0	5.0	K1	M1			
RDE7U2J333J5  H03	U2J (EIA)	630Vdc	33000pF±5%	7.5×8.0	4.0	5.0	B1	E1			
RDE7U2J473J5	U2J (EIA)	630Vdc	47000pF±5%	7.5×8.0	4.0	5.0	B1	E1			
RDE7U2J943JU H03	U2J (EIA)	630Vdc	94000pF±5%	7.7×13.0	4.0	5.0	B1	E1			

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE7U3A100J2 H03	U2J (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A150J2□□H03□	U2J (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A220J2 H03	U2J (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A330J2□□H03□	U2J (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A470J2□□H03□	U2J (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A680J2 H03	U2J (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A101J2 H03	U2J (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A151J2 H03	U2J (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A221J2 H03	U2J (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A331J2 H03	U2J (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A471J2□□H03□	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A681J2 H03	U2J (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A102J2 H03	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A152J3 H03	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A222J3 H03	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A332J4□□H03□	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A472J4□□H03□	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A682J5□□H03□	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A103J5	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A203JU□□H03□	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

 $Two \ blank \ columns \ are \ filled \ with \ the \ lead \ style \ code. \ Please \ refer \ to \ the \ 3 \ columns \ on \ the \ right \ for \ the \ appropriate \ code.$ 

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71E104K0□□H03□	X7R (EIA)	25Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E224K0□□H03□	X7S (EIA)	25Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E224K0□□H03□	X7S (EIA)	25Vdc	0.22µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E474K0 H03	X7S (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E474K0 H03	X7S (EIA)	25Vdc	0.47µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E105K0 H03	X7S (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E105K0 H03	X7S (EIA)	25Vdc	1.0µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E225K1□□H03□	X7S (EIA)	25Vdc	2.2µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDEC71E225K1□□H03□	X7S (EIA)	25Vdc	2.2µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDEC71E475K2 H03	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E475K2   H03	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E106K2 H03	X7S (EIA)	25Vdc	10μF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E106K2□□H03□	X7S (EIA)	25Vdc	10µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E226K3 H03	X7S (EIA)	25Vdc	22µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC71E226K3□□H03□	X7S (EIA)	25Vdc	22μF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71E476MW H03	X7S (EIA)	25Vdc	47μF±20%	5.5×7.5	4.0	5.0	K1	M1
RDER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H221K0□□H03□	X7R (EIA)	50Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H471K0□□H03□	X7R (EIA)	50Vdc	470pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H102K0□□H03□	X7R (EIA)	50Vdc	1000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H152K0□□H03□	X7R (EIA)	50Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H152K0□□H03□	X7R (EIA)	50Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	M1

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

Continued from the preceding pa	ige. 🔰							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER71H222K0   H03	X7R (EIA)	50Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H332K0□□H03□	X7R (EIA)	50Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H472K0□□H03□	X7R (EIA)	50Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H472K0□□H03□	X7R (EIA)	50Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H682K0□□H03□	X7R (EIA)	50Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H133K0 H03	X7R (EIA)	50Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H333K0 H03	. ,	50Vdc		4.0×3.5	2.5	5.0	K1	M1
	X7R (EIA)		33000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H333K0 H03	X7R (EIA)	50Vdc	33000pF±10%					
RDER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H104K0 H03	X7R (EIA)	50Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H104K0 H03	X7R (EIA)	50Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H684K2□□H03□	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H684K2□□H03□	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H105K2□□H03□	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H155K2 H03	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H155K2 H03	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H225K2□□H03□	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H225K2□□H03□	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71H475K2□□H03□	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71H475K2	X7S (EIA)	50Vdc	4.7μF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71H106K3 H03	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC71H106K3□□H03□	X7S (EIA)	50Vdc	10μF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71H226MW H03	X7S (EIA)	50Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RDER72A221K0 H03	X7R (EIA)	100Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A221K0□□H03□	X7R (EIA)	100Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A331K0□□H03□	X7R (EIA)	100Vdc	330pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A471K0□□H03□	X7R (EIA)	100Vdc	470pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A471K0□□H03□	X7R (EIA)	100Vdc	470pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A681K0□□H03□	X7R (EIA)	100Vdc	680pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A102K0□□H03□	X7R (EIA)	100Vdc	1000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A152K0□□H03□	X7R (EIA)	100Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	M1

Continued from the preceding pa	ge. 🔰							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER72A152K0 H03	X7R (EIA)	100Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A222K0□□H03□	X7R (EIA)	100Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A333K1 HO3	X7R (EIA)	100Vdc	47000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A473K1 H03	, ,	100Vdc	47000pF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A473K1	X7R (EIA) X7R (EIA)	100Vdc	68000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A683K1 H03	X7R (EIA)	100Vdc	68000pF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A104K1 H03	X7R (EIA)	100Vdc	0.1µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A104K1 H03	X7R (EIA)	100Vdc	0.1µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A154K2 H03	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER72A154K2   H03	X7R (EIA)	100Vdc	0.15μF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.13μΓ±10% 0.22μF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.22μF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A334K1 H03	X7R (EIA)	100Vdc	0.22μ1 ±10 % 0.33μF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A334K1  H03	X7R (EIA)	100Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A474K1  H03	X7R (EIA)	100Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72A474K1   H03	X7R (EIA)	100Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC72A155K3 H03	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC72A155K3 H03	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC72A225K3 H03	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC72A225K3 H03	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC72A475MW H03	, ,	100Vdc	4.7µF±20%	5.5×7.5	4.0	5.0	K1	M1
RDER72E102K1 H03	X7R (EIA)	250Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E152K1 H03	X7R (EIA)	250Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E222K1□□H03□	X7R (EIA)	250Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E332K1□□H03□	X7R (EIA)	250Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E472K1□□H03□	X7R (EIA)	250Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E682K1□□H03□	X7R (EIA)	250Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E103K1 H03	X7R (EIA)	250Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E153K1 H03	X7R (EIA)	250Vdc	15000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E223K1 H03	X7R (EIA)	250Vdc	22000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72E333K2 H03	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72E473K2 H03	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72E683K2 H03	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72E104K2 H03	X7R (EIA)	250Vdc	0.10µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72E154K3 H03	X7R (EIA)	250Vdc	0.15µF±10%	5.5×5.0	3.15	5.0	K1	M1
RDER72E224K3 H03	X7R (EIA)	250Vdc	0.22µF±10%	5.5×5.0	3.15	5.0	K1	M1
RDER72E334K4 HO3	X7R (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72E474K4   H03	X7R (EIA)	250Vdc	0.47µF±10%	7.5×5.5	4.0	5.0	K1	M1
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER72E684K5□□H03□	X7R (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72E105K5□□H03□	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72E225MU□□H03□	X7R (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72H102K1□□H03□	X7R (EIA)	500Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H152K1□□H03□	X7R (EIA)	500Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H222K1 H03	X7R (EIA)	500Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H332K1□□H03□	X7R (EIA)	500Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H472K1□□H03□	X7R (EIA)	500Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H682K1□□H03□	X7R (EIA)	500Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H103K1 - H03	X7R (EIA)	500Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H153K2□□H03□	X7R (EIA)	500Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H223K2□□H03□	X7R (EIA)	500Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H333K2□□H03□	X7R (EIA)	500Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H473K2□□H03□	X7R (EIA)	500Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H683K3□□H03□	X7R (EIA)	500Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72H104K3 H03	X7R (EIA)	500Vdc	0.1µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72H154K4□□H03□	X7R (EIA)	500Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72H224K4□□H03□	X7R (EIA)	500Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72H334K5□□H03□	X7R (EIA)	500Vdc	0.33µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72H474K5□□H03□	X7R (EIA)	500Vdc	0.47µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72H684MU□□H03□	X7R (EIA)	500Vdc	0.68µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72H105MU□□H03□	X7R (EIA)	500Vdc	1.0µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72J102K2□□H03□	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J152K2□□H03□	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J222K2□□H03□	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J332K2□□H03□	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J472K2□□H03□	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J682K2□□H03□	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J103K2□□H03□	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J153K2□□H03□	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J223K2□□H03□	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J333K3□□H03□	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72J473K3□□H03□	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72J683K4□□H03□	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72J104K4□□H03□	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72J154K5□□H03□	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER72J224K5□□H03□	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER72J474MU□□H03□	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1
RDER73A471K2□□H03□	X7R (EIA)	1000Vdc	470pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A681K2□□H03□	X7R (EIA)	1000Vdc	680pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A102K2□□H03□	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A152K2□□H03□	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A222K2□□H03□	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A332K2□□H03□	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A472K2□□H03□	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A682K2□□H03□	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A103K2 H03	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A153K3 H03	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER73A223K3 H03	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER73A333K4 HO3	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER73A473K4 H03	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER73A683K5 HO3	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER73A104K5 H03	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER73A224MU H03	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

NI	o. Item		S	pecifi	cations		To at Mari		
No.	Iter	m	Temperature Compensating	Туре	High Dielectric Constant Type		Test Meth	nod	
1	Operating Ten Range	nperature	-55 to +125°C		Char. X7R, X7S: -55 to +125°C		-		
2	Appearance		No defects or abnormalitie	!S		Visual inspecti	on		
3	Dimension and	d Marking	See previous pages			Visual inspecti	on, Vernier Calip	er	
						voltages of Ta	s should not be d ble are applied b narge/Discharge	etweer	the terminals
		Between Terminals	No defects or abnormalitie		Temperature Compensating Type	Rated Voltage DC50V, DC100V DC250V DC630V DC1kV	300% o 200% o 150% o 130% o	of the rated voltage	
								200% d	of the rated voltage of the rated voltage of the rated voltage of the rated voltage
4	Dielectric Strength	Body Insulation	No defects or abnormalitie	25		as shown in the figure, for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge			Approx. 2mm
				Rated Voltage         Test Voltage           DC25V,DC50V,DC100V         250% of the rated voltage           DC250V, DC500V         200% of the rated voltage           DC630V, DC1kV         DC1300V					
5	Insulation Resistance	Between Terminals	More than 10000M or 500MΩ • μF (Whichever is smaller)	Rated DC25 More (Which Rated DC25 More	igh Dielectric Constant Type Id voltage:  IV, DC50V, DC100V Ithan 10000M or 500MΩ • μF Inhever is smaller) Id voltage:  IV, DC500V, DC630V, DC1kV Ithan 10000M or 100MΩ • μF Inhever is smaller)	DC voltage no in case of rate normal temper charging.	resistance shoul t exceeding the r d vlotage: DC50 rature and humid arge current ≦ 50	rated vo OV, DC6 lity and	oltage (DC500V 630V, DC1kV) at
6	Capacitance		Within the specified tolera	nce			ce, Q/D.F. should		
							cy and voltage s		n the table.
						Capacitano	Compensating Ty		Voltage
									AC0.5 to 5V
			30pF min.: Q ≧ 1000		Char Y7D: 0.035 may	C ≤ 1000p C > 1000p			(r.m.s.) AC1±0.2V
7	Q/Dissipation	Factor (D.F.)	30pF max.: Q ≧ 400+20C C: Nominal capacitance (pl	F)	Char. X7R: 0.025 max. Char. X7S: 0.125 max.	· ·	: Constant Type	·	(r.m.s.)
						Capacitano		cv	Voltage
						C ≦ 10µF			AC1±0.2V (r.m.s.)
						C > 10μF	120±24ŀ	Ηz	AC0.5±0.1V (r.m.s.)

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N	o. Item			Specifi	cations		Took Motherd	
No.	Ite	m	Tempera	ture Compensating Type	High Dielectric Constant Type		Test Method	
8	Capacitance T Characteristic	pacitance Temperature aracteristics		Temperature Coefficient 25 to 125°C: 0±30ppm/°C -55 to 25°C: 0+30/-72ppm/°C 25 to 125°C: -750±120ppm/°C -55 to 25°C: -750+120/-347ppm/°C	Char. Capacitance Change X7R Within ± 15% X7S Within ± 22%	The capacitance change should be measured after min at each specified temperature stage.  The temperature coefficient is determined using the capacitance measured in step 3 as a reference. When cycling the temperature sequentially from step 1 through 5 (-55 to +125°C) the capacitance should within the specified tolerance for the temperature coefficient and capacitance change.  Step Temperature (°C)  1 25±2 2 -55±3 3 25±2 4 125±3 5 25±2  Pretreatment (for high dielectric constant type) Perform a heat treatment at 150+0/-10°C for 1h, then let sit at room temperature for 24±2h.		
9	Tensile Strength Terminal Strength		Termina	tion not to be broken or	loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.		
		Bending Strength	Termina	tion not to be broken or	loosened	and then bent 90° direction. Each wir	ould be subjected to a force of 2.5N at the point of egress in one e is then returned to the original 90° in the opposite direction at the er 2 to 3s.	
		Appearance	No defe	cts or abnormalities		The capacitor should be firmly soldered to the supporting lead wire and vibrated at a frequency ran, of 10 to 55Hz, 1.5mm in total amplitude, with about		
	Vibration	Capacitance	Within t	he specified tolerance				
10	Resistance	Q/D.F.	30pF ma	n.: Q ≥ 1000 ax.: Q ≥ 400+20C nal capacitance (pF)	Char. X7R: 0.025 max. Char. X7S: 0.125 max.	1 minute rate of vi	bration change from 10 to 55Hz Apply for a total of 6h, 2h each in 3	
11	Solderability of Leads			re should be soldered wi n over 3/4 of the circum	th uniform coating on the axial ferential direction.	(JIS-K-8101) solut then into molten s depth of dipping is terminal body. Temp. of solder: 245	apacitor is dipped into a 25% ethanol tion of rosin (JIS-K-5902) and older for 2±0.5s. In both cases the up to about 1.5 to 2mm from the ±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu) ±5°C H60A or H63A Eutectic Solder	
	Resistance to	t		asured and observed cha ations in the following ta	aracteristics should satisfy the ble.	solder 1.5 to 2.0m	uld be immersed in the melted m from the root of terminal at	
	(Non-Preheat)	Appearance	No defe	cts or abnormalities		260±5°C for 7.5+0 Pre-treatment	)/-1s.	
12 ' 1		Capacitance Change		2.5% or ±0.25pF ver is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	Capacitor should then place at roor	be stored at 150+0/-10°C for 1h, n temperature for 24±2h	
	Dielectric Strength (Between Terminals)		No defe	cts		before initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2h at room condition*.		

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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lo.	lte	m	Specif	fications		Test Method			
	100		Temperature Compensating Type	High Dielectric Constant Type					
	Resistance to Soldering Hea	t	The measured and observed ch specifications in the following t	•	60+0/-5s.				
	(On-Preheat)	Appearance	No defects or abnormalities			lead wires should be immersed to 2.0mm from the root of ter			
.2		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	260±5°C for 7.5+0/-1s. Pre-treatment				
2		Dielectric Strength (Between Terminals)	No defects		Capacitor should be stored at 150+0/-10°C for then place at room temperature for 24±2h befo initial measurement. (For Char. X7R, X7S)  Post-treatment  Capacitor should be stored for 24±2h at room condition*.				
	Resistance to Soldering Heat		The measured and observed ch specifications in the following t	•		ature of iron-tip: 350±10°C			
	(Soldering Iron Method)	Appearance	No defects or abnormalities			time: 3.5±0.5s.			
.2	iron Metriod)	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	Soldering position Straight Lead: 1.5 to 2.0mm from the root of tel Crimp Lead: 1.5 to 2.0mm from the end of lead				
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2h at room condition*.				
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	cycles.	itor should be subjected to 5 t	·		
13	Temperature	Q/D.F.	30pF min.: Q $\ge$ 350 10pF to 30pF: Q $\ge$ 275+5C/2 10pF max.: Q $\ge$ 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	Set for 24  Step  1 2	Time (min) 30±3 3 max.			
	Cycle	Insulation Resistance	1000MΩ, 50MΩ • μF min. (whic	hever is smaller)	3 4	Max. Operating Temp. ±3 Room Temp.	30±3 3 max.		
		Dielectric Strength (Between Terminals)	No defects or abnormalities		Pretreatment (for high dielectric constant type)     Perform a heat treatment at 150+0/-10°C for 1h, at then let sit at room temperature for 24±2h.				
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%		pacitor at 40±2°C and relative of for 500 <sup>±2</sup> 40.	humidity of		
.4	Humidity (Steady State)	Q/D.F.	30pF min.: $Q \ge 350$ 10pF to 30pF: $Q \ge 275+5C/2$ 10pF max.: $Q \ge 200+10C$ C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	Remove and set for 24±2h at room temperature, the measure.  • Pretreatment (for high dielectric constant type) Perform a heat treatment at 150+0/-10°C for 1h, an				
		Insulation Resistance	1000MΩ, 50MΩ • μF min. (whic	hever is smaller)	then let Si	t at room temperature for 24±	zn.		
		Appearance	No defects or abnormalities				40.000		
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	in 90 to 9!	rated voltage for 500 <sup>±2</sup> 4h at 4 5% humidity. nd set for 24±2h at room temp			
.5	Humidity Load	Q/D.F.	30pF min.: Q ≧ 200 30pF max.: Q ≧ 100+10C/3 C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	measure. (Charge/D • Pretreati	oischarge current ≦ 50mA) ment (for high dielectric consta heat treatment at 150+0/-10	ant type)		
		Insulation Resistance	500MΩ or 25MΩ • μF min. (whi	chever is smaller)	1	t at room temperature for 24±			

 $<sup>^{\</sup>star}$  "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	D		Specific	cations	Test Method				
INO.	ltem		Temperature Compensating Type	High Dielectric Constant Type		rest Met	noa		
		Appearance	No defects or abnormalities		Apply voltage in Table for 1000 <sup>±48</sup> <sub>6</sub> h at the maximum operating temperature±3°C.  Remove and set for 24±2h at room temperature, the measure. (Charge/Discharge current ≤ 50mA)  Rated Voltage Test Voltage				
		Capacitance Change	Within ±3% or ±0.3pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%					
	High		(		Temperature Compensating	DC50V, DC100V, DC250V	150% of the rated voltage		
16	Temperature		20=F ==i= . 0 > 2F0		Туре	DC630V, DC1kV	120% of the rated voltage		
	Load	Q/D.F.	30pF min.: Q ≥ 350 10pF to 30pF: Q ≥ 275+5C/2	Char. X7R: 0.04 max.	High Dielectric Constant Type	DC25V, DC50V, DC100V, DC250V	150% of the rated voltage		
			10pF max.: Q ≧ 200+10C C: Nominal capacitance (pF)	Char. X7S: 0.2 max.		DC500V, DC630V	120% of the rated voltage		
			C. Norminal capacitance (pr)		·	DC1kV	110% of the rated voltage		
		Insulation Resistance	1000MΩ, 50MΩ • μF min. (which	never is smaller)	Pretreatment (for high dielectric constant type)     Appy test voltage for 1h at test temperature. Remove and set for 24±2h at room temperature.				
		Appearance	No defects or abnormalities		The capacitor should be fully immersed, unagitated, in reagent at 20 to 25°C for 30±5s and then removed gently. Marking on the surface of the capacitor should immediately be visually examined.  Reagent:  Isopropyl alcohol				
17	Solvent Resistance	Marking	Legible						

# Leaded MLCC for General Purpose

■ RDE Series Large Capacitance and High Allowable Ripple Current (DC250V-DC630V)

#### **Features**

- 1. Higher capacitance with DC-Bias; approximately 40% higher than X7R under loaded rated voltage.
- 2. Meet LF (Lead Free) and HF (Halogen Free)
- 3. Allowable higher ripple current
- Reduces acoustic noise
   Approximately 15dB reduction in comparison to leaded X7R characteristics parts.

   Approximately 30dB reduction in comparison to SMD X7R characteristics part because the contact area is smaller than a SMD.

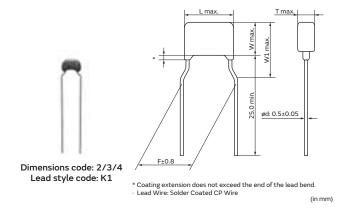
#### **Applications**

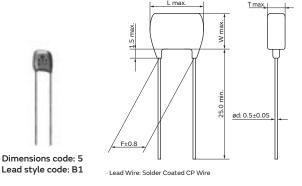
- 1. DC smoothing capacitor for LED bulb
- 2. PFC capacitor for general use SMPS
- 3. Replace Al-E capacitor for long-life equipment

#### **Dimensions**

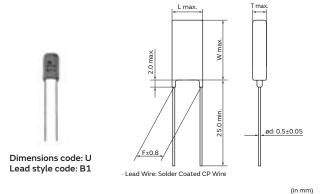
Dimensions and	DC Rated	Dimensions (mm)							
Lead Style Code	Voltage	L	w	W1	Т	F	d		
2K1/2M1	250V/450V/630V	5.5	4.0	6.0		5.0	0.5		
3K1/3M1	250V/450V/630V	5.5	5.0	7.5	See	5.0	0.5		
4K1/4M1	250V/450V/630V	7.5	5.5	8.0	the individual product	5.0	0.5		
5B1/5E1	250V/450V/630V	7.5	7.5*	-	specification	5.0	0.5		
UB1/UE1	250V/450V/630V	7.7	12.5*	-		5.0	0.5		

<sup>\*</sup>DC630V: W+0.5mm





(in mm)



### Marking

Rated Voltage	DC250V	DC450V	DC630V		
Code Temp. Char.		X7T			
2	(F) 683 K47	() 153 K97	(P 153)		
3, 8	(M 334 K47	(M104) K97	( <u>M</u> 223 K77		
5, U	② 225 M47	(H) 474 K97	(M) 474 M77		
Temperature Characteristics	Marked with code (X7T char.: 7)				
Nominal Capacitance	Marked with 3 figures				
Capacitance Tolerance	Marked with code				
Rated Voltage	Marked with code (DC250V: 4, DC450V: 9, DC630V: 7)				
Manufacturer's Identification	Marked with M				

# 

RDED72E333K2	X7T (EIA) X7T (EIA)	250Vdc 250Vdc	33000pF±10%	5.5×4.0				Taping
RDED72E683K2□□H03□	X7T (EIA)		47000-F.100/		3.15	5.0	K1	M1
			47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
	VZT (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E104K3□□H03□	X7T (EIA)	250Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E154K3□□H03□	X7T (EIA)	250Vdc	0.15µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E224K4□□H03□	X7T (EIA)	250Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E334K4□□H03□	X7T (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E474K5□□H03□	X7T (EIA)	250Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E684K5□□H03□	X7T (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E105K5□□H03□	X7T (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E225MU□□H03□	X7T (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W103K2□□H03□	X7T (EIA)	450Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W153K2□□H03□	X7T (EIA)	450Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W223K2□□H03□	X7T (EIA)	450Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W333K2□□H03□	X7T (EIA)	450Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W473K2□□H03□	X7T (EIA)	450Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W683K3□□H03□	X7T (EIA)	450Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W104K3□□H03□	X7T (EIA)	450Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W154K4□□H03□	X7T (EIA)	450Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72W224K5□□H03□	X7T (EIA)	450Vdc	0.22µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W334K5□□H03□	X7T (EIA)	450Vdc	0.33µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W474K5□□H03□	X7T (EIA)	450Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W564K5□□H03□	X7T (EIA)	450Vdc	0.56µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W105MU□□H03□	X7T (EIA)	450Vdc	1.0µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W125MU□□H03□	X7T (EIA)	450Vdc	1.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72J103K2□□H03□	X7T (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J153K2□□H03□	X7T (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J223K3□□H03□	X7T (EIA)	630Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J333K3□□H03□	X7T (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J473K3□□H03□	X7T (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J683K4□□H03□	X7T (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72J104K5□□H03□	X7T (EIA)	630Vdc	0.10μF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J154K5□□H03□	X7T (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J224K5□□H03□	X7T (EIA)	630Vdc	0.22μF±10%	7.5×8.0	4.5	5.0	B1	E1

1 01	0							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDED72J274K5□□H03□	X7T (EIA)	630Vdc	0.27µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J474MU□□H03□	X7T (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.5	5.0	B1	E1
RDED72J564MU□□H03□	X7T (EIA)	630Vdc	0.56µF±20%	7.7×13.0	4.5	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code. The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

No.	lte	m	Specifications	Test Method
1	Operating Ten Range	nperature	-55 to +125°C	-
2	Appearance		No defects or abnormalities	Visual inspection
3	Dimension and	d Marking	See previous pages	Visual inspection, Vernier Caliper
		Between Terminals	No defects or abnormalities	The capacitor should not be damaged when voltage in Table is applied between the terminations for 1 to 5s.  (Charge/Discharge current ≤ 50mA)  Rated Voltage Test Voltage  DC250V 200% of the rated voltage  DC450V 150% of the rated voltage  DC630V 120% of the rated voltage
4	Dielectric Strength	Body Insulation	No defects or abnormalities	The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and 200% of the rated DC voltage is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA)
5	Insulation Between Resistance Terminals		More than $10000M\Omega$ or $100M\Omega$ • $\mu F$ , Whichever is smaller	The insulation resistance should be measured with DC500V (DC250V in case of rated voltage: DC250V,DC450V) at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA)
6	Capacitance		Within the specified tolerance	The capacitance/D.F. should be measured at the
7	Dissipation Fa	ctor (D.F.)	0.01 max.	frequency of 1±0.1kHz and a voltage of AC1±0.2V(r.m.s.).
8	Capacitance Temperature Characteristic	nperature Within +22/-33%		The capacitance change should be measured after 5min at each specified temperature stage.    Step
9	Terminal Strength	Tensile Strength	Termination not to be broken or loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2.5N and then bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.
		Appearance	No defects or abnormalities	The capacitor should be firmly soldered to the
10	Vibration	Capacitance	Within the specified tolerance	supporting lead wire and vibrated at a frequency range of 10 to 55Hz, 1.5mm in total amplitude, with about a
10	Resistance D.F.		0.01 max.	1 minute rate of vibration change from 10 to 55Hz and back to 10Hz. Apply for a total of 6h, 2h each in 3 mutually perpendicular directions.

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No.	lter	n	Specifications		Test Method				
11	Solderability o	f Leads	Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.	ethanol (JIS- in weight pro Z-3282) for dipping is up body.	l of a capacitor is dipped -K-8101) and rosin (JIS-boportion) and then into m 2±0.5s. In both cases the 0 to about 1.5 to 2mm from er: 245±5°C Lead Free Sold 235±5°C H60A or H63A	<-5902) (25% rosin nolten solder (JIS- e depth of om the terminal er (Sn-3.0Ag-0.5Cu)			
	Resistance to		The measured and observed characteristics should satisfy the	The lead wir	es should be immersed ir	the melted			
	Soldering Heat		specifications in the following table.		2.0mm from the root of				
	(Non-Preheat)	Appearance	No defects or abnormalities	260±5°C for 7.5+0/-1s.					
12		Capacitance	Within ±10%	Pre-treatme	ent hould be stored at 150+(	0/-10°C for 1h.			
1		Change	WIGHII £10%		at room temperature for				
		Dielectric Strength (Between Terminals)	No defects	Post-treatm		h at room			
	Resistance to		The measured and observed characteristics should satisfy the specifications in the following table.		pacitor should be stored a	at 120+0/-5°C for			
	Soldering Heat (On-Preheat)		No defects or abnormalities	60+0/-5s.  Then, the lead wires should be immersed in the me					
		Appearance	No defects of abhormaticles	solder 1.5 to	2.0mm from the root of	terminal at			
12		Capacitance Change	Within ±10%	Pre-treatme	ent				
2		Dielectric Strength (Between Terminals)	No defects	Capacitor should be stored at 150+0/-10°C f then place at room temperature for 24±2h be initial measurement. Post-treatment Capacitor should be stored for 24±2h at roon condition*.					
	Resistance to Soldering Heat		The measured and observed characteristics should satisfy the specifications in the following table.	Test condition Temperrature of iron-tip: 350±10°C					
	(Soldering Iron Method)	Appearance	No defects or abnormalities		me: 3.5±0.5s.				
12		Capacitance Change	Within ±10%		ad: 1.5 to 2.0mm from th				
3		Dielectric Strength (Between Terminals)	No defects	Crimp Lead: 1.5 to 2.0mm from the end of lead be Pre-treatment Capacitor should be stored at 150+0/-10°C for 1 then place at room temperature for 24±2h before initial measurement. Post-treatment Capacitor should be stored for 24±2h at room condition*.					
		Appearance	No defects or abnormalities	The capacito	or should be subjected to	5 temperature			
		Capacitance Change	Within ±12.5%	cycles.	T(00)	Time (min)			
		D.F.	0.01 max.	Step 1	Temperature (°C) -55±3	Time (min) 30±3			
13	Temperature	Insulation	0.01 max.	2 3	Room Temp.	3 max.			
13	Cycle	Resistance	More than 1000MΩ or 50MΩ • μF (Whichever is smaller)	4	125±3 Room Temp.	30±3 3 max.			
		Dielectric Strength (Between Terminals)	No defects or abnormalities		ent eat treatment at 150+0/ at room temperature for i				
		Appearance	No defects or abnormalities		acitor at 40±2°C and rela				
	Humidity	Capacitance Change	Within ±12.5%	90 to 95% f	or 500 <sup>±24</sup> h. Remove and om temperature, then m	set for			
14	' '	D.F.	0.02 max.	- Pretreatme	ent				
	State)	Insulation Resistance	More than $1000 \text{M}\Omega$ or $50 \text{M}\Omega$ • $\mu\text{F}$ (Whichever is smaller)	Perform a he	eat treatment at 150+0/ at room temperature for 1				
			No. defeate an along amount (192)	Apply the ra	ted voltage at 40±2°C ar	nd relative			
		Appearance	No defects or abnormalities	Apply the rated voltage at 40±2°C and relative humidity of 90 to 95% for 500 <sup>±2</sup> 0. Remove and set					
	Liumidit	Appearance Capacitance Change	Within ±12.5%	humidity of 90 to 95% for 500 <sup>+2</sup> <sub>0</sub> h. Remove and s for 24±2h at room temperature, then measure.					
15	Humidity Load	Capacitance		humidity of for 24±2h at	90 to 95% for 500 <sup>+2</sup> <sub>0</sub> h.	Remove and set			

<sup>\* &</sup>quot;room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

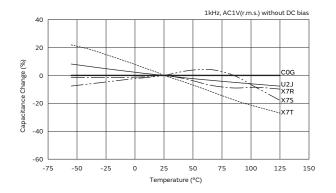
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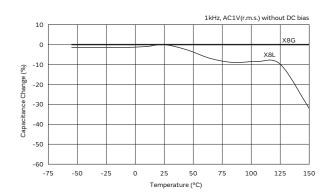
No	. Ite	m	Specifications		Test Method			
		Appearance	No defects or abnormalities	Apply voltage in Table for 1000 <sup>±48</sup> <sub>O</sub> h at the maximum				
		Capacitance Change	Within ±12.5%	operating temperature. Remove and set for 24±2h at room temperature, then measure.  (Charge/Discharge current ≤ 50mA)				
		D.F.	0.02 max.	Rated Voltage Test Voltage				
16	High Temperature	Insulation Resistance		DC250V	150% of the rated voltage			
	Load			DC450V	130% of the rated voltage			
				DC630V	120% of the rated voltage			
			More than 1000MΩ or 50MΩ • μF (Whichever is smaller)	Pretreatment     Apply test voltage for 1h, at test temperature. Remove and set for 24±2h at room temperature.				
		Appearance	No defects or abnormalities		be fully immersed, unagitated, in			
17	Solvent Resistance	Marking	Legible	reagent at 20 to 25°C for 30±5s and then removed gently. Marking on the surface of the capacitor should immediately be visually examined.  Reagent:  Isopropyl alcohol				

### Characteristics Reference Data (Typical Example)

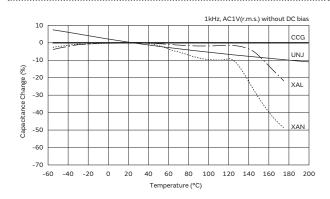
#### Capacitance - Temperature Characteristics (RCE, RDE Series)



#### Capacitance - Temperature Characteristics (RHE Series)

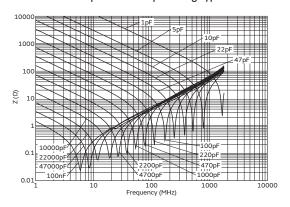


#### Capacitance - Temperature Characteristics (RHS Series)

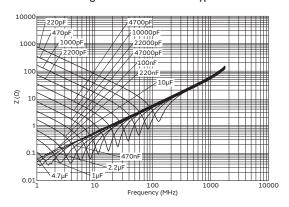


#### Impedance - Frequency Characteristics

Temperature Compensating Type

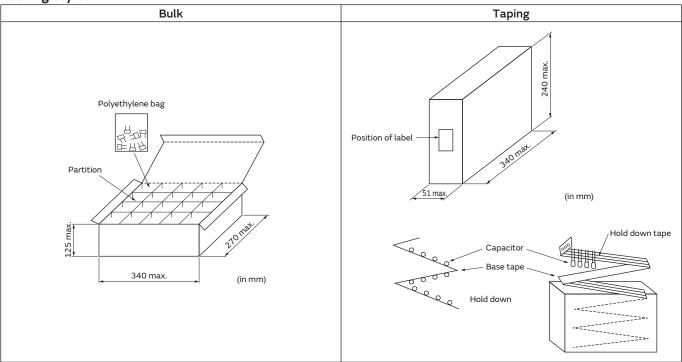


High Dielectric Constant Type



### **Packaging**

#### **Packing Styles**



#### **Minimum Quantity**

### [Bulk]

Series	Dimensions Code	Minimum Quantity (pcs./Bag)*	
RCE	Except for "U"	500	
	U	200	
RHE	0, 1, 2, 3, W	500	
RHS	0, 1, 2	500	
RDE	Except for "U"	500	
	U	200	

### [Taping]

i abiiigj						
Series	Dimensions Code	Minimum Quantity (pcs./Ammo Pack)*				
	0, 1, 2	2000				
RCE	3	2000 or 1500				
	4, 5, U, W	1500				
RHE	0, 1, 2	2000				
	3, W	1500				
DUG	0, 1	2000				
RHS	2	1500				
RDE	0, 1, 2	2000				
	3	2000 or 1500				
RDE	4, 5, W	1500				
	U	1500 or 1000				

Please order with an integral multiple of the minimum quantity above.

 $\hbox{*Minimum Quantity may change depends on part number}.$ 

Please check our website "Product details".

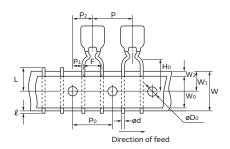
"Minimum Quantity" means the numbers of units of each delivery or order. The quantity should be an integral multiple of the "minimum quantity." (Please note that the actual delivery quantity in a package may change sometimes.)

### **Packaging**

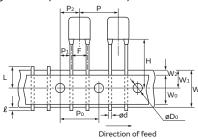
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**Taping Dimensions** 

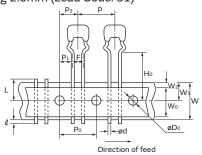
Inside Crimp Taping Lead Spacing 5.0mm (Lead Code: M1, M2)

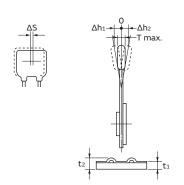


Straight Taping
Lead Spacing 2.5mm (Lead Code: DB, DG)
Lead Spacing 5.0mm (Lead Code: E1)



Outside Crimp Taping Lead Spacing 2.5mm (Lead Code: S1)





Dimension of capacitors on tape (in mm)

	Lead Code						
ltem	Code	DB	DG	E1	M1	M2	S1
Pitch of component	Р		•	12.7	±1.0	•	
Pitch of sprocket hole	Po	12.7±0.2					
Lead spacing	F	2.5 +0.4		5.0 <sup>+0.6</sup> <sub>-0.2</sub>		2.5 <sup>+0.4</sup> <sub>-0.2</sub>	
Length from hole center to component center	P <sub>2</sub>	6.35±1.3					
	P1	5.1±0.7		3.85±0.7		5.1±0.7	
Length from hole center to lead		$254\pm1.5$ total length of componestspitch × 20					
Deviation along tape, left or right defect	ΔS	0±2.0					
Carrier tape width	W	18.0±0.5					
Position of sprocket hole	W1	9.0 <sup>+0</sup> <sub>-0.5</sub>					
Lead distance between reference and	Ho	- 16.0±0.5 20.0±0.5		16.0±0.5			
bottom plane	Н	16.0±0.5 20.0±0.5 17.5±0.5 -					
Protrusion length	l	0.5 max.					
Diameter of sprocket hole	Do	4.0±0.1					
Lead diameter	d	0.5±0.05					
Total tape thickness	t1	0.6±0.3					
Total thickness of tape and lead wire	t2	1.5 max.					
Body thickness	Т	Depends on Part Number					
Deviation across tape	Δh1	1.0 max.					
Deviation across tape	Δh2	(Dimension code W, U: 2.0 max.)					
Portion to cut in case of defect	L	11.0 +0 -1.0					
Hold down tape width	Wo	9.5 min.					
Hold down tape position	W2	1.5±1.5					

### **!\Caution**

#### **(Caution (Storage and Operating Condition)**

Operating and storage environment

The insulating coating of capacitors does not form a perfect seal; therefore, do not use or store capacitors in a corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. Also avoid exposure to moisture. Before cleaning, bonding or molding this product, verify that these processes do not affect product quality by testing the performance of a cleaned, bonded or molded product in the intended

equipment. Store the capacitors where the temperature and relative humidity do not exceed 5 to 40 degrees centigrade and 20 to 70%.

Use capacitors within 6 months after delivery.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

### **⚠** Caution (Rating)

#### 1. Operating Voltage

When DC-rated capacitors are to be used in AC or ripple current circuits, be sure to maintain the Vp-p value of the applied voltage or the V0-p which contains DC bias within the rated voltage range.

When the voltage is applied to the circuit, starting or stopping may generate irregular voltage for a transit period because of resonance or switching. Be sure to use a capacitor with a rated voltage range that includes these irregular voltages.

When DC-rated capacitors are to be used in input circuits from commercial power source (AC filter), be sure to use Safety Recognized Capacitors because various regulations on withstand voltage or impulse withstand established for all equipment should be taken into consideration.

Voltage	DC Voltage	DC+AC Voltage	AC Voltage	Pulse Voltage (1)	Pulse Voltage (2)
Positional Measurement	Vo-p	Vo-p	Vp-p	Vp-p	Vp-p

#### 2. Operating Temperature

Keep the surface temperature of a capacitor below the upper limit of its rated operating temperature range. Be sure to take into account the heat generated by the capacitor itself (Please refer to the following column 3) and by peripheral components.

#### 3. Self-generated Heat

When the capacitor is used in a high-frequency current, pulse current or similar current, it may have self-generated heat due to dielectric loss. In the case of "High Dielectric Constant Type Capacitors", applied voltage load should be such that self-generated heat is within 20 °C under the condition where the capacitor is subjected at an atmosphere temperature of 25 °C. Excessive heat may lead to deterioration of the capacitor's characteristics and reliability. Please contact us if self-generated heat occurs with "Temperature Compensating Type Capacitors".

#### 4. Measurement of Temperature

The surface temperature of capacitor should be measured under the condition where an atmosphere

temperature and a heat from peripheral components are stable.

The self-generated heat should be measured under the conditions where the capacitor is subjected at an atmosphere temperature 25°C and is not affected by radiant heat from other components or wind from surroundings.

When measuring, use a thermocouple of small thermal capacity -K of  $\emptyset 0.1$ mm.

Never attempt to perform measurement with the cooling fan running. Otherwise, accurate measurement cannot be ensured.

#### 5. Fail-Safe

Be sure to provide an appropriate fail-safe function on your product to prevent a second damage that may be caused by the abnormal function or the failure of our product.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

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### **!**Caution

#### **(Caution (Soldering and Mounting)**

#### 1. Vibration and impact

Do not expose a capacitor or its leads to excessive shock or vibration during use.

#### 2. Soldering

When soldering this product to a PCB/PWB, do not exceed the solder heat resistance specification of the capacitor. Subjecting this product to excessive heating could melt the internal junction solder and may result in thermal shocks that can crack the ceramic element.

#### 3. Bonding, resin molding and coating

In case of bonding, molding or coating this product, verify that these processes do not affect the quality of the capacitor by testing the performance of the bonded, molded or coated product in the intended equipment.

In case the amount of application, dryness/ hardening conditions of adhesives and molding resins containing organic solvents (ethyl acetate, methyl ethyl ketone, toluene, etc.) are unsuitable, the outer coating resin of a capacitor may be damaged by the organic solvents and may result, worst case, in a short circuit.

The variation in thickness of adhesive or molding resin or coating may cause an outer coating resin cracking and/or ceramic element cracking of a capacitor in a temperature cycling.

4. Treatment after bonding, resin molding and coating When the outer coating is hot (over 100 degrees centigrade) after soldering, it becomes soft and fragile, so please be careful not to give it mechanical stress.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

#### **Caution (Handling)**

Vibration and impact

Do not expose a capacitor or its leads to excessive shock or vibration during use.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

### **Notice**

#### Notice (Rating)

Capacitance change of capacitor
In case of high dielectric constant type capacitors
Capacitors have an aging characteristic, whereby
the capacitor continually decreases its capacitance
slightly if the capacitor is left on for a long
time. Moreover, capacitance might change greatly
depending on the surrounding temperature or an
applied voltage.

#### Notice (Soldering and Mounting)

#### 1. Cleaning (ultrasonic cleaning)

To perform ultrasonic cleaning, observe the following conditions.

Rinse bath capacity: Output of 20 watts per liter or less.

Rinsing time: 5 min. maximum.

Do not vibrate the PCB/PWB directly.

Excessive ultrasonic cleaning may lead to fatigue

destruction of the lead wires.

#### 2. Soldering and Mounting

Insertion of the Lead Wire

- When soldering, insert the lead wire into the PCB without mechanically stressing the lead wire.
- Insert the lead wire into the PCB with a distance appropriate to the lead space.

# Global Locations

For details please visit www.murata.com



#### **Note**

### 1 Export Control

#### For customers outside Japan:

No Murata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

#### For customers in Japan:

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

- 2 Please contact our sales representatives or product engineers before using the products in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this catalog.
  - Aircraft equipment
  - Aerospace equipment
  - 3 Undersea equipment
  - Power plant equipment
  - Medical equipment
  - Transportation equipment (vehicles, trains, ships, etc.)
  - Traffic signal equipment
  - 8 Disaster prevention / crime prevention equipment
  - Data-processing equipment
  - Application of similar complexity and/or reliability requirements to the applications listed above

- 3 Product specifications in this catalog are as of February 2018. They are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. If there are any questions, please contact our sales representatives or product engineers.
- 4 Please read rating and \(\Delta\)CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.
- 5 This catalog has only typical specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.
- Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or a third party's intellectual property rights and other related rights in consideration of your use of our products and/or information described or contained in our catalogs. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.
- 7 No ozone depleting substances (ODS) under the Montreal Protocol are used in our manufacturing process.

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