

# RUH

Radial Lead Type  
series

Ultra-High Voltage, High Capacitance  
Low ESR, High ripple current  
Load life of 3,000h at 105°C



## ● Specifications

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	63 to 125Vdc	
Capacitance range	8.2 to 330μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of Standard Ratings (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of Standard Ratings	
Characteristics of impedance	$Z_{+105^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ , $Z_{-55^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ at 100kHz	
Endurance	105°C, 3,000 hrs at rated voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Damp Heat (Steady State)	60°C, 90 to 95% RH, 1,000 hrs, No-applied Voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Resistance to soldering heat	Flow method (260±5°C, 10s)	
	Appearance	No significant damage
	Capacitance change	Within±10% of the initial value
	Tangent of loss angle (tanδ)	≤130% of the initial specified value
	ESR(mΩ)	≤130% of the initial specified value
	Leakage current	≤The initial specified value

\* In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

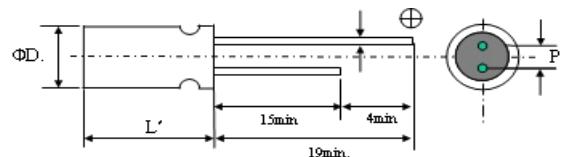
## ● Size List

(unit: mm)

$\mu\text{F}$	RV (SV) 63 (72.4)	80 (92)	100 (115)	125 (143)
8.2	6.3×6			
10	8×7		8×11.5	8×11.5
12		8×11.5		
15	8×7		8×11.5	8×11.5
18			10×11.5	
22		10×11.5	10×11.5	
27	8×11.5	10×11.5		
33	8×11.5			10×11.5
39	8×11.5			
47	10×11.5			
56	10×11.5			
68		10×11.5	10×11.5	
82		10×11.5		
100	10×11.5		10×16	
120	10×11.5			
330	10×16			

RV: Rated Voltage [V] SV: Surge Voltage [V] (at room temperature)

## ● Marking and Dimensions



Size	$\varnothing D \pm 0.5$	L	$L'$	$P \pm 0.5$	$\varnothing d$
6.3×6	6.3	6.0	Lmax	2.5	0.45
8×7	8.0	7.0		3.5	0.45
8×11.5	8.0	11.5	L+1.0max	3.5	0.60
10×11.5	10.0	11.5		5.0	0.60
10×16	10.0	16.0		5.0	0.60

## ● Standard Ratings

Rated Voltage [Vdc]	Rated Capacitance [ $\mu\text{F}$ ]	Size ØD x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (105°C, 100kHz) [mArms]	Tangent of Loss Angel [max.]	Leakage Current [ $\mu\text{A}$ , max.]	Part Number
63	8.2	6.3 x 6	55	1200	0.12	103	63RUH6R8MC6
	10	8 x 7	50	1400	0.12	126	63RUH10MD7
	15	8 x 7	50	1500	0.12	189	63RUH15MD7
	27	8 x 11.5	35	2800	0.12	340	63RUH27MD11
	33	8 x 11.5	30	3000	0.12	416	63RUH33MD11
	39	8 x 11.5	29	3400	0.12	491	63RUH39MD11
	47	10 x 11.5	29	3300	0.12	592	63RUH47ME11
	56	10 x 11.5	28	3400	0.12	706	63RUH56ME11
	100	10 x 11.5	25	4000	0.12	1260	63RUH100ME11
	120	10 x 11.5	25	4000	0.12	1512	63RUH120ME11
	330	10 x 16	20	4500	0.12	4158	63RUH330ME11
80	12	8 x 11.5	38	1900	0.12	192	80RUH12MD11
	22	8 x 11.5	38	2000	0.12	352	80RUH22MD11
	22	10 x 11.5	35	2300	0.12	352	80RUH22ME11
	27	10 x 11.5	35	2400	0.12	432	80RUH27ME11
	47	8 x 11.5	35	2600	0.12	752	80RUH47MD11
	47	10 x 11.5	28	3000	0.12	752	80RUH47ME11
	68	10 x 11.5	30	3000	0.12	1088	80RUH68ME11
	82	10 x 11.5	30	3200	0.12	1312	80RUH82ME11
100	10	8 x 11.5	42	1800	0.12	200	100RUH10MD11
	15	8 x 11.5	40	2000	0.12	300	100RUH15MD11
	18	10 x 11.5	38	2200	0.12	360	100RUH18ME11
	22	10 x 11.5	38	2300	0.12	440	100RUH22ME11
	39	10 x 11.5	35	2500	0.12	780	100RUH39ME11
	47	10 x 11.5	35	2600	0.12	940	100RUH47ME11
	68	10 x 11.5	30	2800	0.12	1360	100RUH68ME11
	100	10 x 16	25	3200	0.12	2000	100RUH100ME16
	10	8 x 11.5	50	1500	0.12	250	125RUH10MD11
125	15	8 x 11.5	50	1800	0.12	375	125RUH15MD11
	33	10 x 11.5	40	2000	0.12	825	125RUH33ME11

Conductive Polymer Hybrid  
Aluminum Electrolytic Capacitors  
Radial Lead Type

Conductive Polymer Hybrid  
Aluminum Electrolytic Capacitors  
SMD Lead Type

Conductive Polymer Aluminum  
Electrolytic Capacitors\_Radial Lead Type

Conductive Polymer Aluminum  
Electrolytic Capacitors\_SMD Lead Type