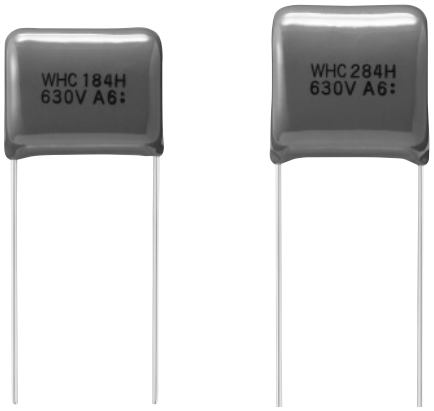
Metallized Polypropylene Film Capacitor

Type: ECWH(C)

Designed for high frequency and pulse applications.



■Features
- ●Excellent electrical characteristics
- ●Low loss
- ●Flame-retardant epoxy resin coating
- ●RoHS directive compliant

■Recommended Applications
- ●General resonance circuit (630 VDC)
- ●Resonance circuits for microwave oven and IH cooker (630 VDC)
- ●Resonance circuits for microwave oven (630 VDC, 1250 VDC)
- ●General high voltage circuit (3000 VDC)

■Explanation of Part Numbers (630 VDC)

1	2	3	4	5	6	7	8	9	10	11
E	C	W	H						C	
Product code		Dielectric & construction		Rated voltage	Capacitance			Cap. Tol.	Suffix	Suffix

6	630VDC

H	±3 %

Suffix	Lead Form
Blank	Straight
C	Cut lead

■Explanation of Part Number for Odd Size Taping (630 VDC)

1	2	3	4	5	6	7	8	9	10	11
E	C	W	H					R		C
Product code		Dielectric & construction		Rated voltage	Capacitance			Ammo 7.5mm	Cap.tol	Suffix

■Explanation of Part Numbers (1250 VDC)

1	2	3	4	5	6	7	8	9	10	11	12
E	C	W	H	C	3	B				J	A
Product code		Dielectric & construction			Rated voltage		Capacitance			Cap. Tol.	Suffix

3B	1250VDC	J	±5 %

Suffix	Lead Form
A	Cut lead

■Explanation of Part Numbers (3000 VDC)

1	2	3	4	5	6	7	8	9	10	11	12
E	C	W	H	C	3	F				J	
Product code		Dielectric & construction			Rated voltage		Capacitance			Cap. Tol.	Suffix

3F	3000VDC	J	±5 %

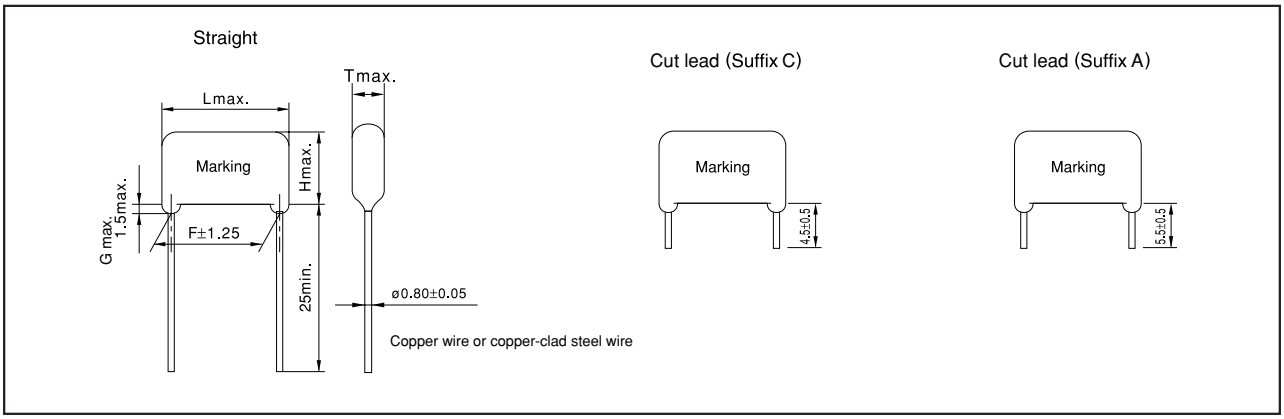
Suffix	Lead Form
Blank	Straight
C	Cut lead

■Specifications

Category temp. range (Including temperature-rise on unit surface)	630 VDC	−40 ℃ to 105 ℃ : General resonance circuit
		−40 ℃ to 85 ℃ : When using compulsive air cooling for a resonance circuit
	1250 VDC	−40 ℃ to 105 ℃ : General resonance circuit
		−40 ℃ to 85 ℃ : When using compulsive air cooling for a resonance circuit
	3000 VDC	−40 ℃ to 85 ℃ : General high voltage circuit
Rated voltage	630 VDC, 1250 VDC, 3000 VDC	
Capacitance range	630 VDC	0.10 μF to 0.33 μF
	1250 VDC	0.08 μF to 0.12 μF
	3000 VDC	0.0024 μF to 0.01 μF
Capacitance tolerance	630 VDC	±3 %(H)
	1250 VDC	±5 %(J)
	3000 VDC	±5 %(J)
Dissipation factor (tanδ)	630 VDC	tanδ ≦0.05 % (20 ℃,1 kHz), tanδ ≦0.1 % (20 ℃,10 kHz)
	1250 VDC	
	3000 VDC	tanδ ≦0.1 % (20 ℃,1 kHz), tanδ ≦0.1 % (20 ℃,10 kHz)
Withstand voltage	Between terminals : Rated volt. (VDC)×150 % 60 s	
Insulation resistance (IR)	630 VDC	IR≧9000 MΩ (20 ℃, 500 VDC, 60 s)
	1250 VDC	
	3000 VDC	IR≧50000 MΩ (20 ℃, 500 VDC, 60 s)

❊ In case of applying voltage in alternating current (50 Hz or 60 Hz sine wave) to a capacitor with DC rated voltage, please refer to the page of “Permissible voltage (R.M.S) in alternating current corresponding to DC rated voltage”.

■Dimensions in mm (not to scale)

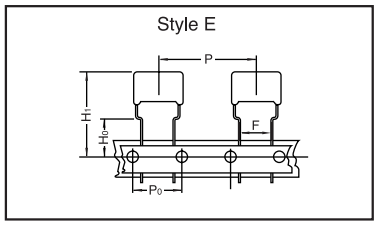


■Packaging Specifications for Bulk Package

Packing quantity : 100 pcs./bag

■Taping Specifications for Automatic Insertion

• Taping style



❊Refer to the page of taping specifications.

●Packaging Specifications

Type	Rated volt.	Cap. range (μF)	Taping style						Packing
			AD	AS	B	C	D	E	
ECWH(C)	630 VDC	0.10 to 0.33						○	Ammo

❊See the column “Rating, Dimensions & Quantity Box” for packing quantity.

■Lead Spacing

Style	Lead Spacing
E	7.5 mm

■Rating & Dimensions

●Rated voltage : 630 VDC Capacitance tolerance : ±3 %(H)

Part No.	Cap (μF)	Dimensions (mm)						Min. order Q'ty	
		L max	T max	H max.	F	G max.	φd	Taping 7.5 mm	Bulk
ECWH6104HC( )	0.10	20.7	8.6	13.5	17.5	1.5	0.8	350	1000
ECWH6114HC( )	0.11	20.7	9.0	13.9	17.5	1.5	0.8	300	
ECWH6124HC( )	0.12	20.7	9.4	14.3	17.5	1.5	0.8		
ECWH6184HC( )	0.18	20.7	11.5	16.3	17.5	1.5	0.8	250	
ECWH6214HC( )	0.21	20.7	12.4	17.2	17.5	1.5	0.8	200	
ECWH6244HC( )	0.24	20.7	13.2	18.1	17.5	1.5	0.8		700
ECWH6274HC( )	0.27	20.7	14.0	18.9	17.5	1.5	0.8		
ECWH6284HC( )	0.28	20.7	14.3	19.1	17.5	1.5	0.8		
ECWH6304HC( )	0.30	20.7	14.8	19.6	17.5	1.5	0.8		
ECWH6324HC( )	0.32	20.7	14.5	20.9	17.5	1.5	0.8		
ECWH6334HC( )	0.33	20.7	14.7	21.1	17.5	1.5	0.8		

↑ Suffix for lead form

●Rated voltage : 1250 VDC Capacitance tolerance : ±5 %(J)

Part No.	Cap (μF)	Dimensions (mm)						Min. order Q'ty
		L max	T max	H max.	F	G max.	φd	Bulk
ECWHC3B803JA	0.08	20.7	12.0	19.0	17.5	1.5	0.8	700
ECWHC3B104JA	0.10	20.7	13.5	20.6	17.5	1.5	0.8	
ECWHC3B114JA	0.11	20.7	14.2	21.3	17.5	1.5	0.8	600
ECWHC3B124JA	0.12	20.7	14.9	21.9	17.5	1.5	0.8	

●Rated voltage : 3000 VDC Capacitance tolerance : ±5 %(J)

Part No.	Cap (μF)	Dimensions (mm)						Min. order Q'ty
		L max	T max	H max.	F	G max.	φd	Bulk
ECWHC3F242J( )	0.0024	25.8	6.1	10.9	22.5	1.5	0.8	1000
ECWHC3F362J( )	0.0036	25.8	7.2	11.9	22.5	1.5	0.8	
ECWHC3F392J( )	0.0039	25.8	7.5	12.2	22.5	1.5	0.8	
ECWHC3F432J( )	0.0043	25.8	6.5	11.2	22.5	1.5	0.8	
ECWHC3F562J( )	0.0056	25.8	7.3	12.0	22.5	1.5	0.8	
ECWHC3F822J( )	0.0082	25.8	7.5	15.3	22.5	1.5	0.8	
ECWHC3F103J( )	0.01	25.8	8.2	16.1	22.5	1.5	0.8	

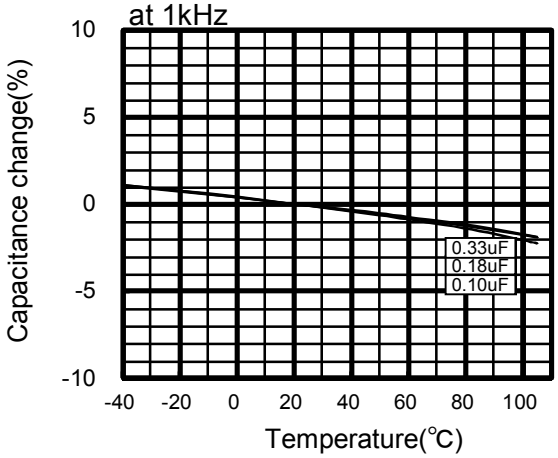
↑ Suffix for lead form

Panasonic

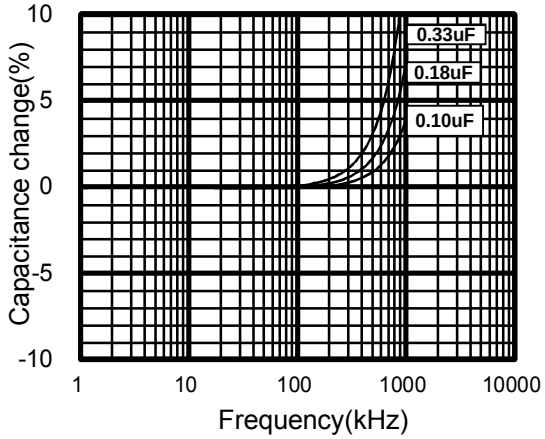
ECWH (C) DC630V series (Metallized Polypropylene Film)

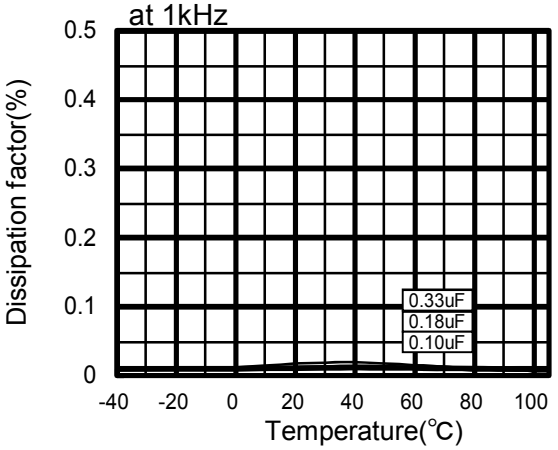
Electrical Characteristics <Typical Data >

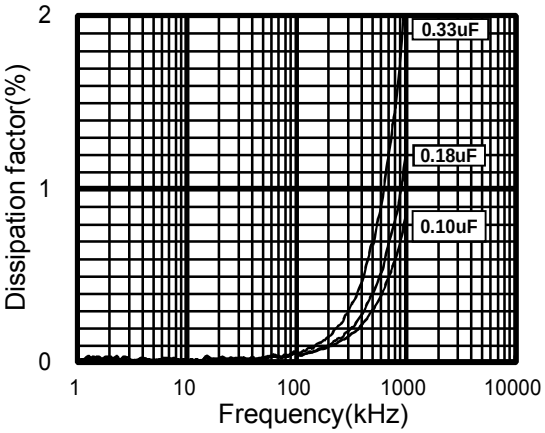
Temperature Characteristics

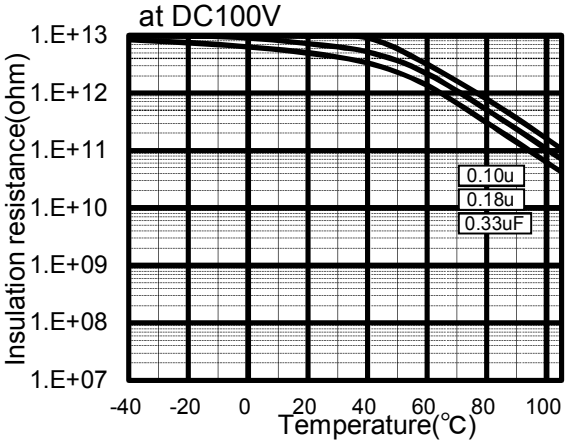


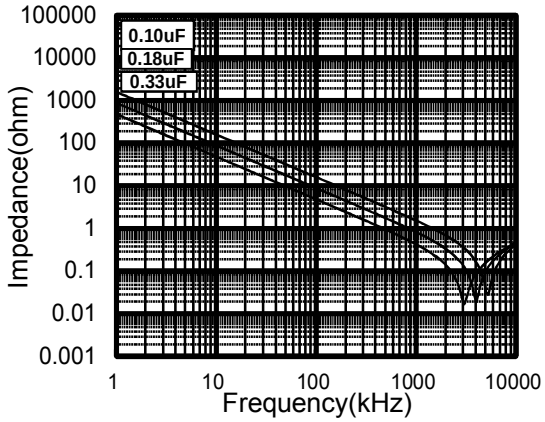
Frequency Characteristics









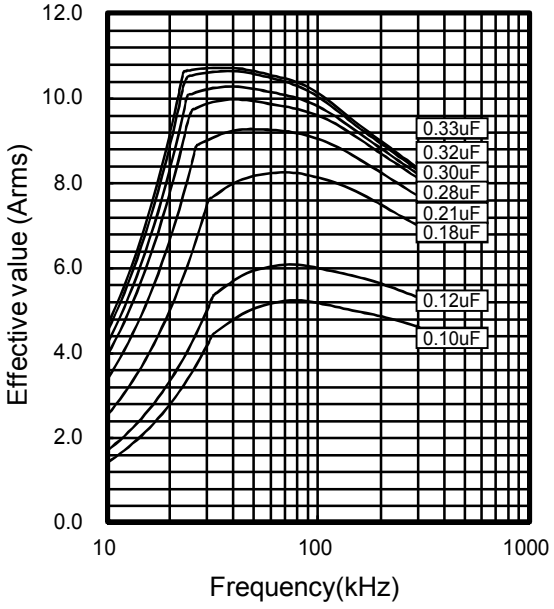


Panasonic

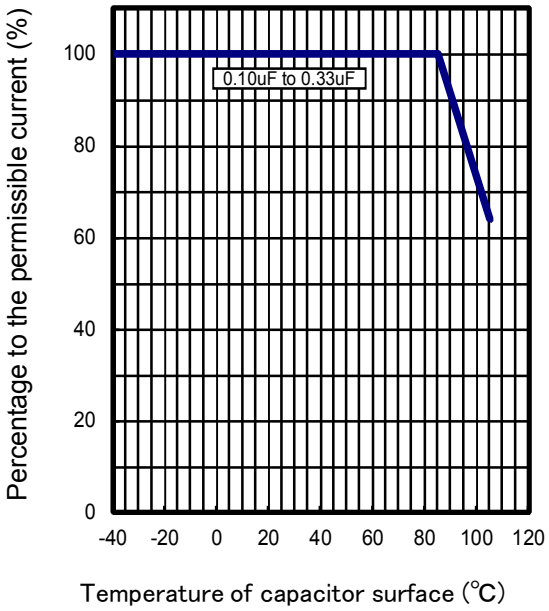
ECWH (C) DC630V series (Metallized Polypropylene Film)

Applicable Specifications<Typical Data >

Permissible Current



Permissible Current Derating by Temperature

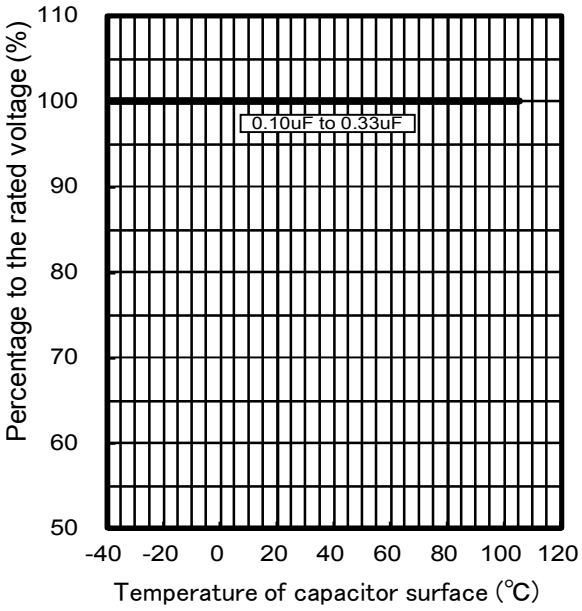


Pulse Handling Capability (dv/dt)

(Max 10000cycles)

Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 630V	0.100	104	500	50
	0.110	114		55
	0.120	124		60
	0.180	184		90
	0.210	214		105
	0.240	244		120
	0.270	274		135
	0.280	284		140
	0.300	304		150
	0.320	324		160
	0.330	334		165

Voltage Derating by Temperature



*Please consult Panasonic if your condition exceeds the above

*P When you use this product, peak voltage must not exceed DC rated voltage.

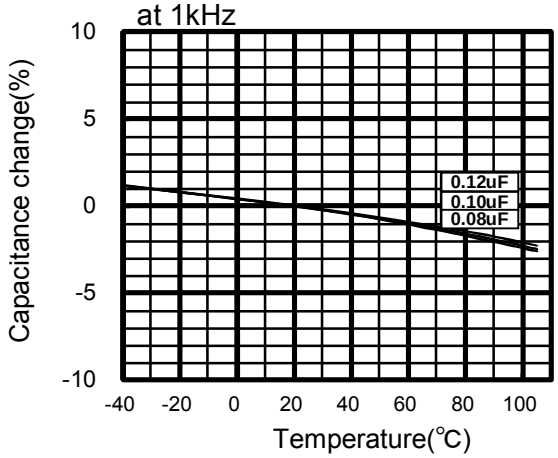
*The current(0-P) value is calculated using nominal capacitance.

Panasonic

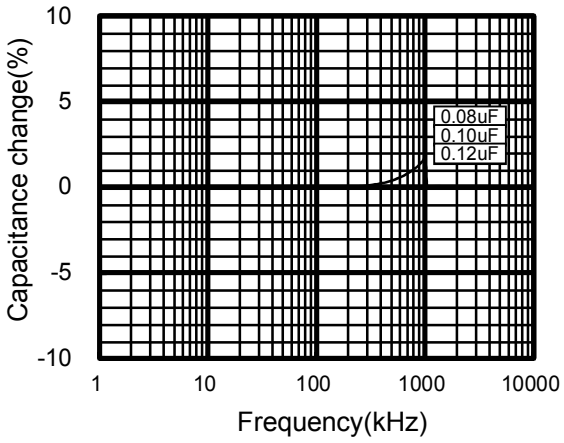
ECWH(C) DC1250V series (Metallized Polypropylene Film)

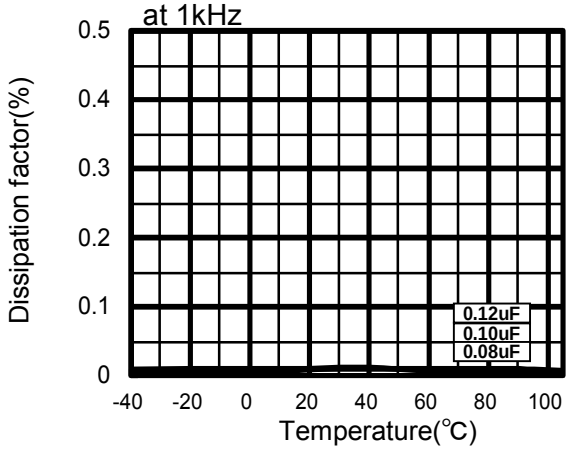
Electrical Characteristics <Typical Data >

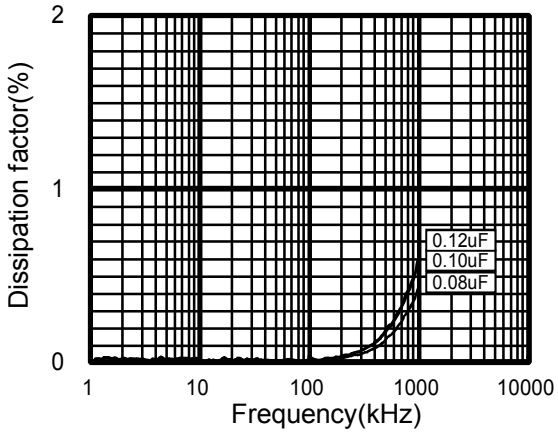
Temperature Characteristics

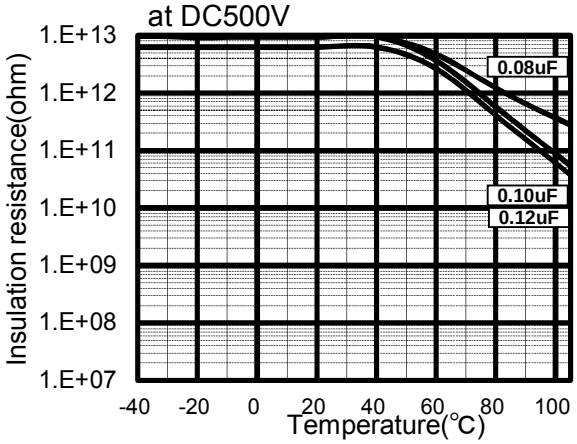


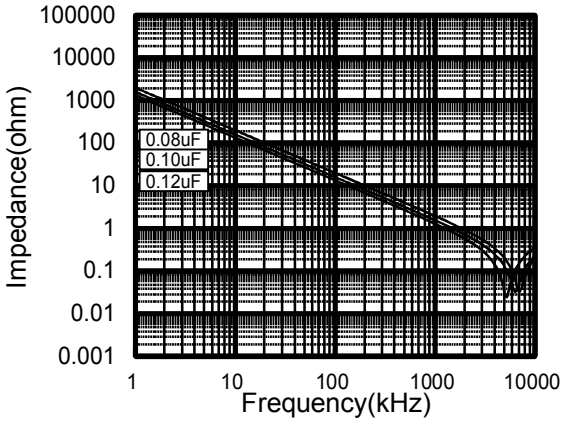
Frequency Characteristics









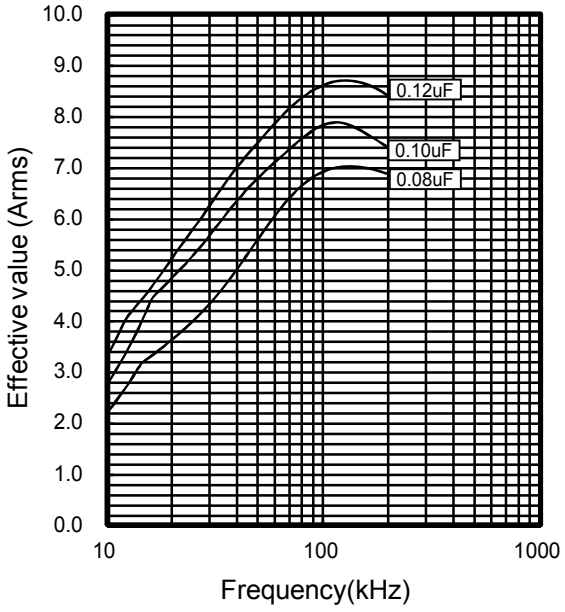


Panasonic

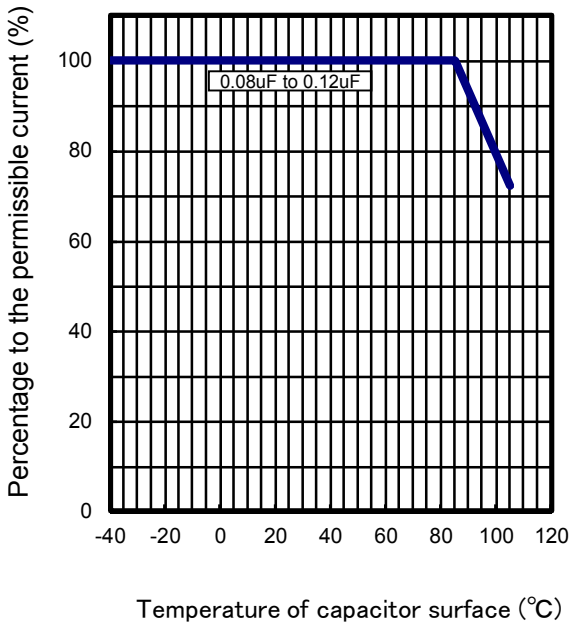
ECWH(C) DC1250V series (Metallized Polypropylene Film)

Applicable Specifications <Typical Data >

Permissible Current



Permissible Current Derating by Temperatu

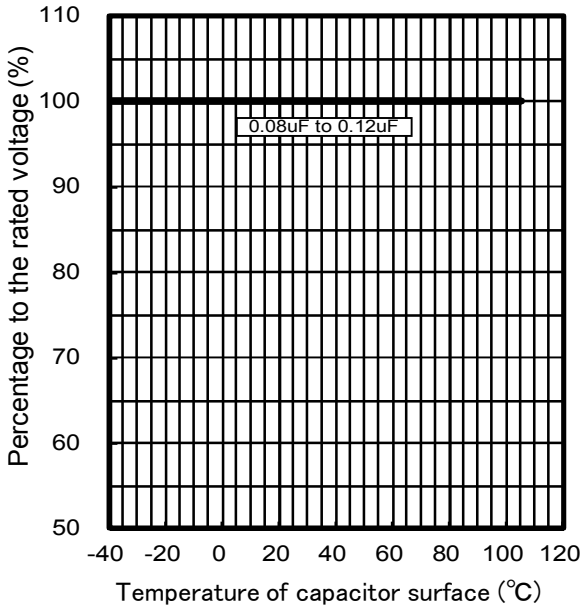


Pulse Handling Capability (dv/dt)

(Max 10000cycles)

Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC1250V	0.080	803	625	50
	0.100	104	500	50
	0.110	114	500	55
	0.120	124	500	60

Voltage Derating by Temperature



*Please consult Panasonic if your condition exceeds the above

*P When you use this product, peak voltage must not exceed DC rated voltage.

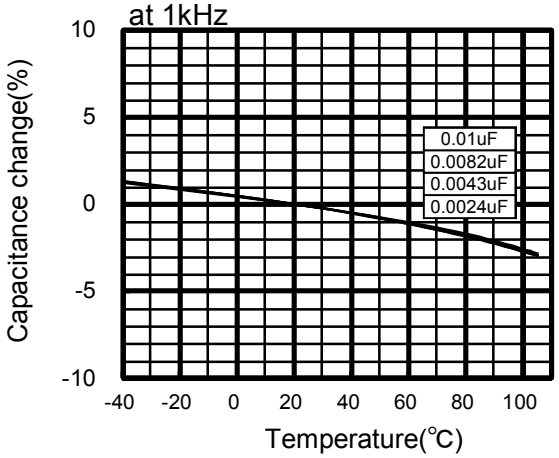
*The current(0-P) value is calculated using nominal capacitance.

Panasonic

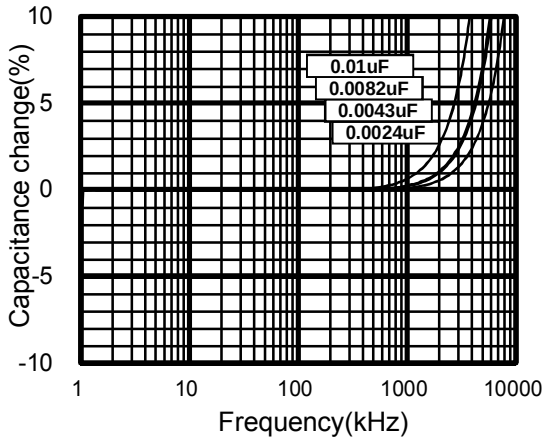
ECWHC Type DC3000V series（Metallized Polypropylene Film）

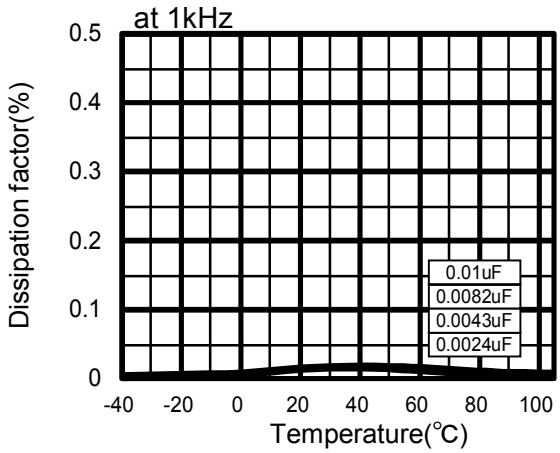
Electrical Characteristics <Typical Data >

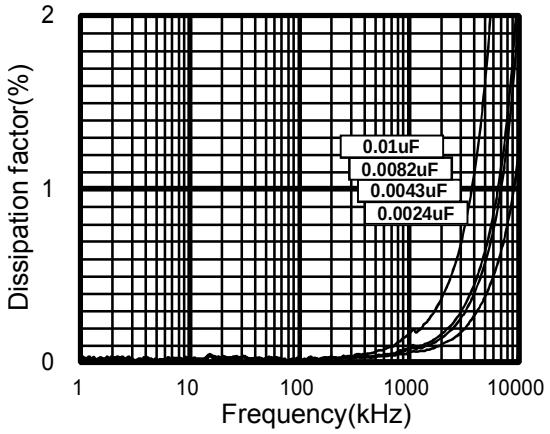
Temperature Characteristics

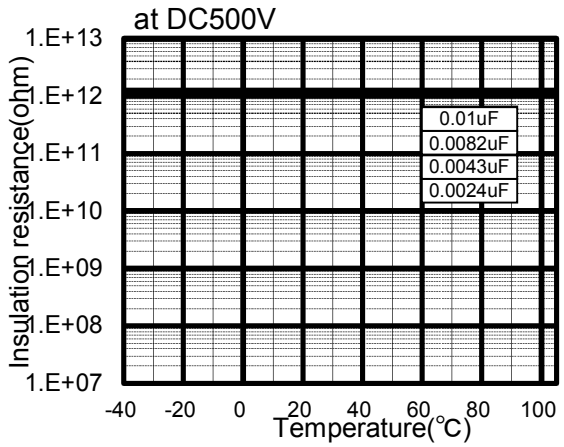


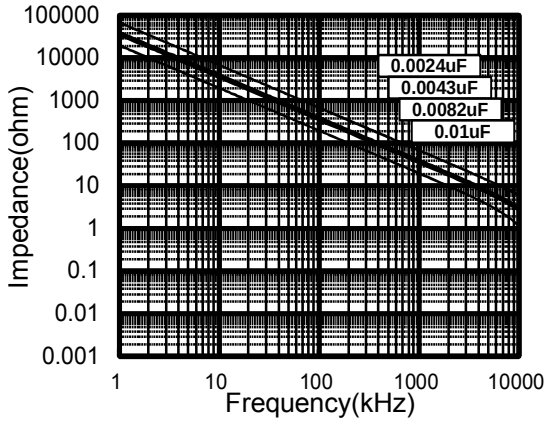
Frequency Characteristics









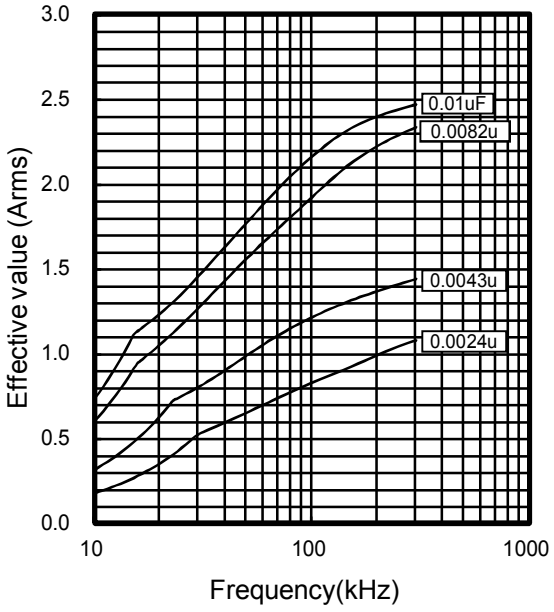


Panasonic

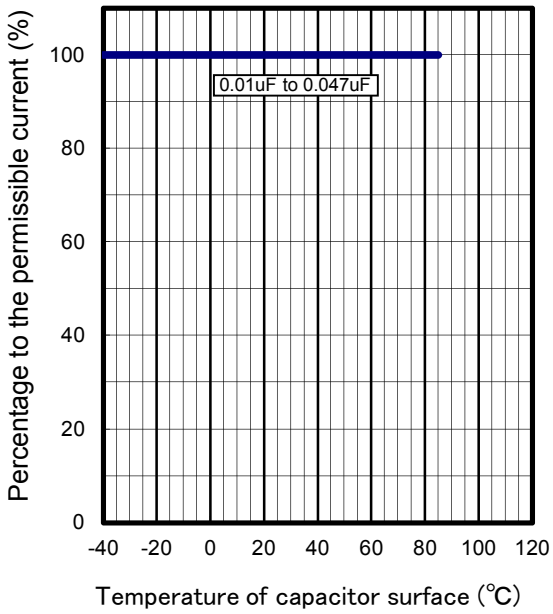
ECWHC Type DC3000V series（Metallized Polypropylene Film）

Applicable Specifications

Permissible Current



Permissible Current Derating by Temperatu

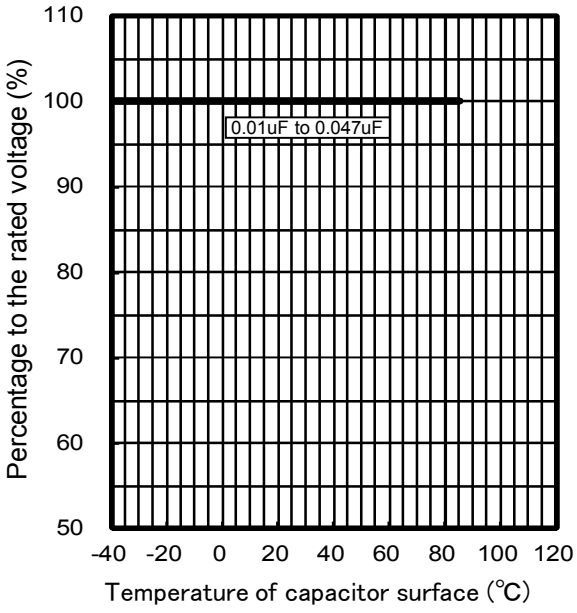


Pulse Handling Capability (dv/dt)

(Max 10000cycles)

Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 3000V	0.0024	242	2000	4.8
	0.0036	362		7.2
	0.0039	392		7.8
	0.0043	432		8.6
	0.0056	562		11.2
	0.0082	822		16.4
	0.0100	103		20.0

Voltage Derating by Temperature



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*P When you use this product, peak voltage must not exceed DC rated voltage.

*The current(0-P) value is calculated using nominal capacitance.