

Film Chip Capacitor

Type : **ECPU**

Stacked dielectric and inner electrode with simple mold - less construction

■ Features

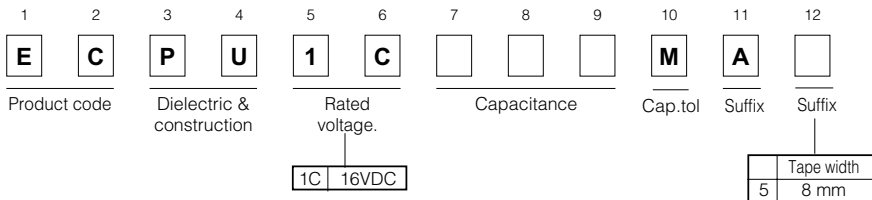
- Low ESR
- Max. capacitance values 1.0 μ F
- Smallest package size in film capacitors 3225/1 μ F
- Applicable for reflow soldering



■ Recommended Applications

- Noise suppressor
- Coupling

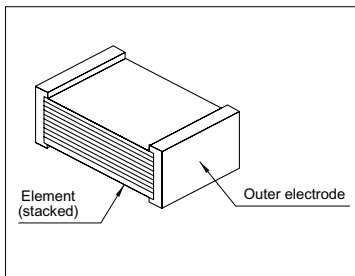
■ Explanation of Part Numbers



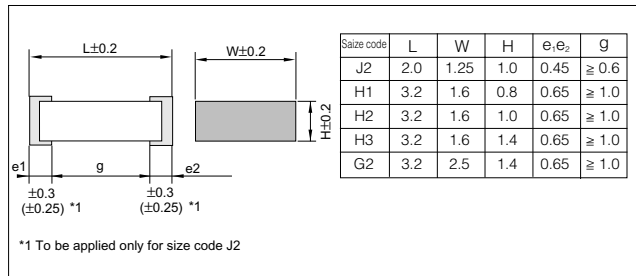
■ Specifications

Category temp. range	- 40 to + 85°C
Rated voltage	16VDC
Capacitance range	0.1 to 1.0 μ F (E6)
Capacitance tolerance	\pm 20% (M)
Dissipation factor	1.5%max. (20°C, 1kHz)
Withstand voltage	Between terminals: Rated volt (VDC) \times 175% 1 to 5s
Insulation resistance	C \leq 0.33 μ F:1000 Ω min.(20°C, 10VDC 60s) C>0.33 μ F:300 Ω • μ Fmin.(20°C, 10VDC 60s)
Soldering conditions	Reflow :soldering240°Cmax. and 30sec max.at more than 210°C (Temp.at cap.surface)

■ Construction



■ Dimensions in mm (not to scale)



■ Taping Specification for Automatic Insertion(Mounting)

Refer to the PDF file of the taping specification.

■ Rating, Dimensions & Quantity/Reel

Part No.	Cap. (μ F).	Dimensions (mm)				Quantity
		L	W	H	Size Code	
ECPU1C104MA5	0.1	2.0	1.25	1.0	J2	3000
ECPU1C154MA5	0.15	3.2	1.6	0.8	H1	
ECPU1C224MA5	0.22	3.2	1.6	0.8	H1	
ECPU1C334MA5	0.33	3.2	1.6	1.0	H2	
ECPU1C474MA5	0.47	3.2	1.6	1.4	H3	2000
ECPU1C684MA5	0.68	3.2	1.6	1.4	H3	
ECPU1C105MA5	1.0	3.2	2.5	1.4	G2	

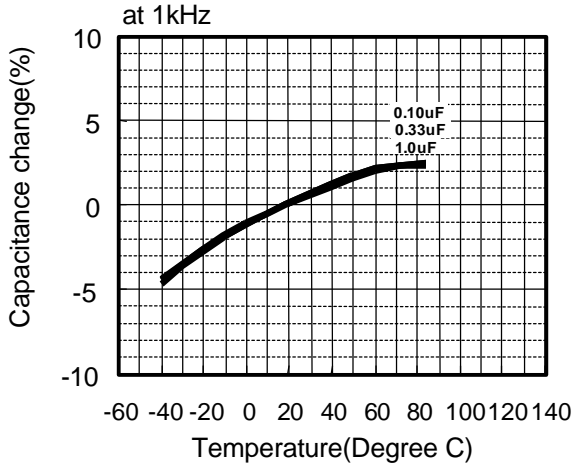
■ Example for Land Dimensions(mm)

Size Code	Land dimensions		
	Reflow soldering		
	A	B	C
J2	0.8	2.4	1.1
H1	1.8	3.6	1.4
H2	1.8	3.6	1.4
H3	1.8	3.6	1.4
G2	1.8	3.6	2.3

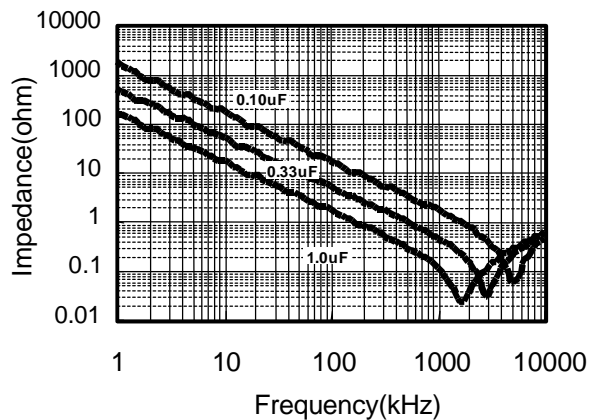
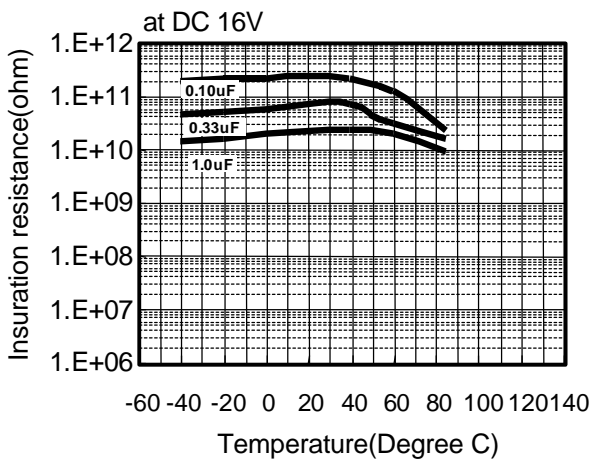
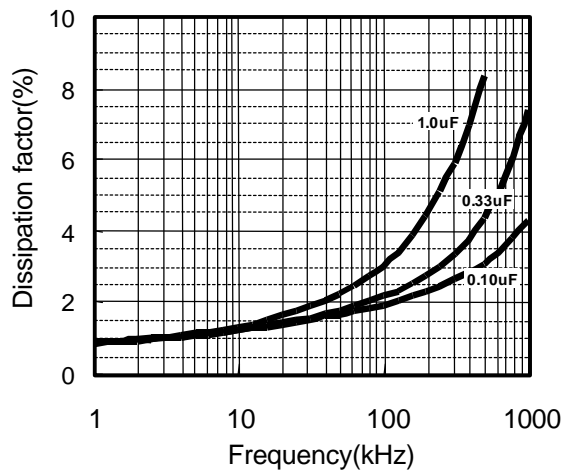
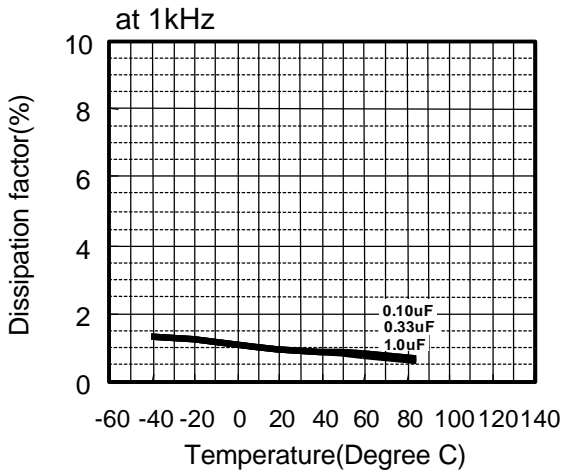
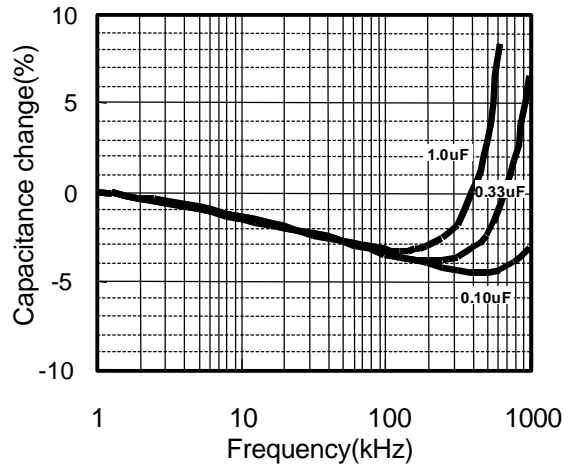
EPCU (A) Type DC16V series (Stacked Metallized Film)

Electrical Characteristics <Typical Data >

Temperature Characteristics



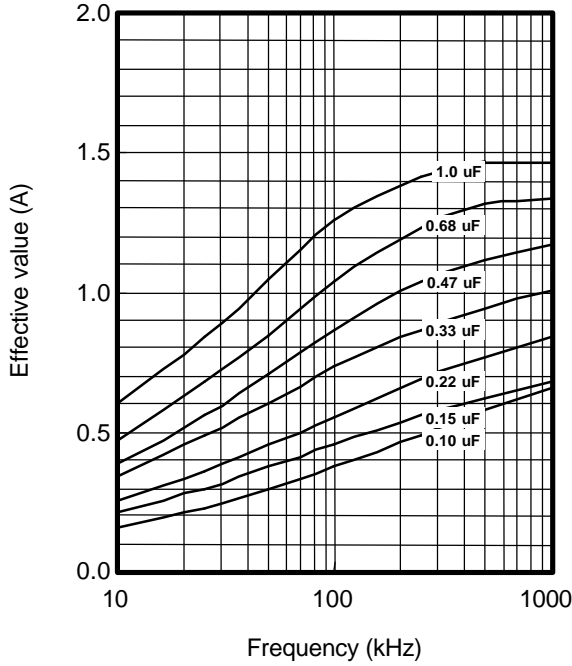
Frequency Characteristics



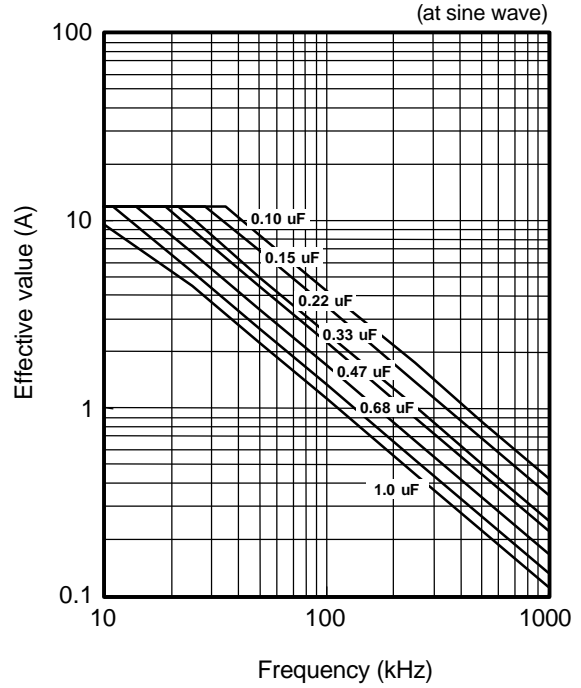
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Applicable Specifications

Permissible Current



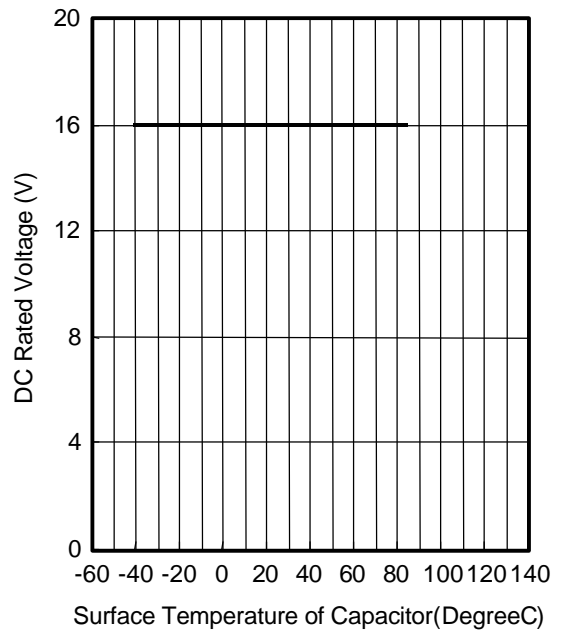
Permissible Voltage



**Pulse Handling Capability (dv/dt)
(Max 10000cycles)**

Rating Voltage	Capacitance Value(uF)	Code	dv/dt(V/us)	Current _(o,p) (A)
DC 16V	0.10	104	19	1.9
	0.15	154	15	2.3
	0.22	224	13	2.9
	0.33	334	10	3.3
	0.47	474	7	3.3
	0.68	684	5	3.4
	1.0	105	3	3.0

Voltage Derating by Temperature



* Please consult Panasonic if your condition exceeds the above spec.

*Permissible voltage graph is the case of sine waveform. When you use this product, peak voltage must not exceed DC rated voltage.

*The current_(o,p) value is calculated using nominal capacitance.