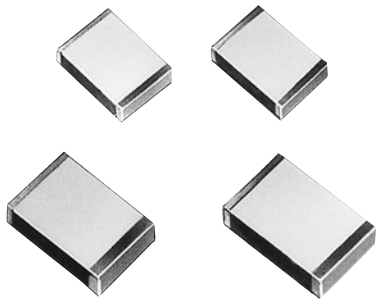
Stacked Metallized PPS Film Chip Capacitor

Series : **ECHU(C)**



Stacked metallized PPS film as dielectric with simple mold-less construction

Features

- Small in size
- Low loss and excellent frequency characteristics
- For reflow soldering
- RoHS directive compliant

Recommended applications

- Time-constant
- Filtering
- Oscillation and resonance
- Resonance circuit for LCD backlight inverter unit

Explanation of part number

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

1	100 V.DC

G	±2 %
J	±5 %

Code	Tape width
9	12 mm
V	16 mm

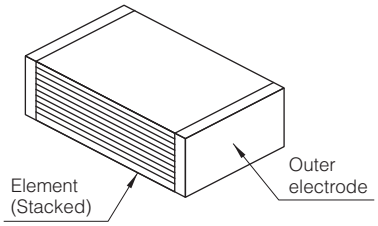
Specifications

Category temp. range (Including temperature-rise on unit surface)	– 55 °C to +105 °C
Rated voltage	100 V.DC
Capacitance range	0.010 µF to 0.22 µF (E12)
Capacitance tolerance	±2 %(G), ±5 %(J)
Dissipation factor (tan δ)	tan $\delta \leqq$ 0.6 % (20 °C, 1 kHz)
Withstand voltage	Between terminals : Rated volt. (V.DC)×150 %, 60 s
Insulation resistance (IR)	IR ≧ 3000 MΩ (20 °C, 100 V.DC, 60 s)
Soldering conditions	Reflow soldering : 260 °C max. and 95 sec max. at more than 220 °C (Temp. at capacitor surface)

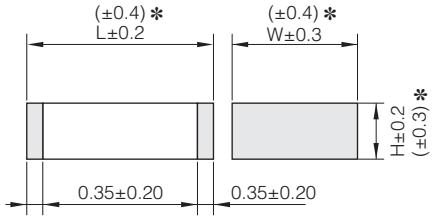
✻ In case of applying voltage in alternating current (50 Hz or 60 Hz sine wave) to a capacitor with DC rated voltage, please refer to the page of “Permissible voltage (R.M.S) in alternating current corresponding to DC rated voltage”.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

Construction



Dimensions



✻ To be applied only for size code Z, Y

Unit : mm

Size code	L	W	H
E1	4.8	3.3	1.4
E2	4.8	3.3	2.0
E3a	4.8	3.3	2.4
E3	4.8	3.3	2.8
D1	6.0	4.1	1.8
D2	6.0	4.1	2.0
D3	6.0	4.1	2.4
D4	6.0	4.1	2.8
D5	6.0	4.1	3.2
Z	7.1	5.0	✻
Y	7.1	6.3	✻

✻ Refer to the column
" Rating, Dimensions&Quantity"

Taping specification for automatic mounting

Refer to the page of taping specifications

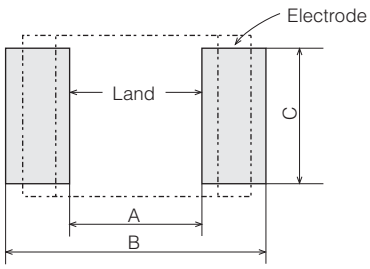
Rating · Dimensions · Quantity

● Capacitance tolerance : ±2 %(G), ±5 %(J)

Capacitance (μF)	Rated voltage 100 V.DC					
	Part No.	Dimensions (mm)			Size code	Q'ty
		L	W	H		
0.010	ECHU1103□C9	4.8	3.3	1.4	E1	3000
0.012	ECHU1123□C9	4.8	3.3	1.4	E1	
0.015	ECHU1153□C9	4.8	3.3	2.0	E2	
0.018	ECHU1183□C9	4.8	3.3	2.0	E2	
0.022	ECHU1223□C9	4.8	3.3	2.4	E3a	2000
0.027	ECHU1273□C9	4.8	3.3	2.8	E3	
0.033	ECHU1333□C9	6.0	4.1	1.8	D1	3000
0.039	ECHU1393□C9	6.0	4.1	2.0	D2	
0.047	ECHU1473□C9	6.0	4.1	2.4	D3	2000
0.056	ECHU1563□C9	6.0	4.1	2.8	D4	
0.068	ECHU1683□C9	6.0	4.1	3.2	D5	
0.082	ECHU1823□C9	7.1	5.0	2.8	Z	1500
0.10	ECHU1104□C9	7.1	5.0	3.0	Z	
0.12	ECHU1124□C9	7.1	5.0	3.4	Z	
0.15	ECHU1154□CV	7.1	6.3	3.4	Y	1000
0.18	ECHU1184□CV	7.1	6.3	4.0	Y	
0.22	ECHU1224□CV	7.1	6.3	4.8	Y	

✻ □ : Capacitance tolerance code

Recommended for land dimensions



Unit : mm

Size code	Land dimensions		
	Reflow soldering		
	A	B	C
E1, E2, E3a, E3	2.6	6.6	3.0
D1, D2, D3, D4, D5	3.8	7.8	3.8
Z	4.5	9.0	4.6
Y	4.5	9.0	5.7

✻ It is not warrantable that you can mount the capacitor without trouble under all the mounting condition when "Recommender for Land dimensions" is adopted.

Panasonic

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