

## Film Chip Capacitor

Type: **ECP(U)B**

Stacked dielectric and inner electrode with simple mold-less construction

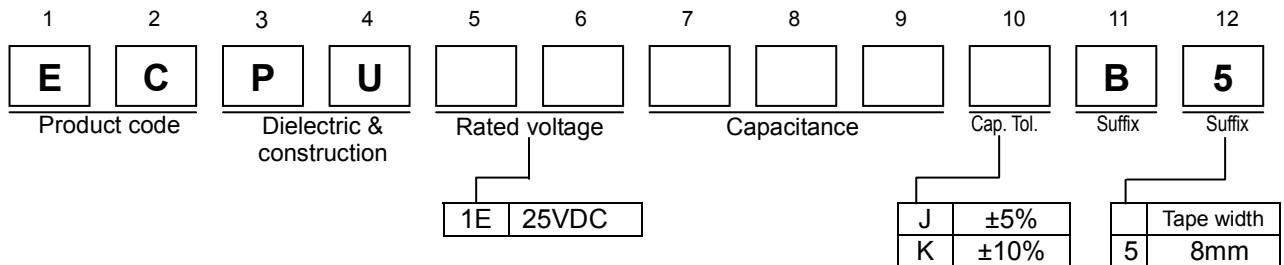
### ■ Features

- Low ESR
- Max. capacitance values 1.0 $\mu$ F
- Smallest package size in film capacitors 3216/1.0 $\mu$ F
- Applicable for reflow soldering

### ■ Recommended Applications

- Noise suppressor
- Coupling circuit for Audio

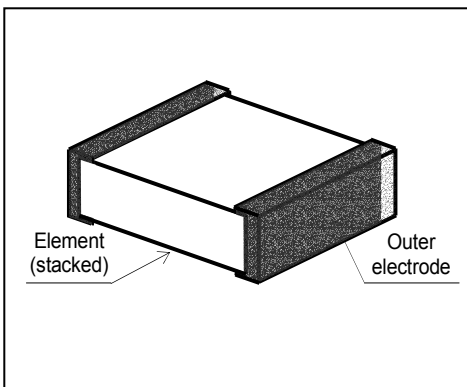
### ■ Explanation of Numbers



### ■ Specification

Category temp. range	-40 to +105 °C
Rated voltage	25VDC
Capacitance range	0.01 $\mu$ F to 1.0 $\mu$ F (E12)
Capacitance tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K)
Withstand voltage	Between terminals : Rated volt. (VDC) $\times 150\%$ , 1min
Dissipation factor	1.5% max. (20 °C , 1kHz)
Insulation resistance	0.010 $\mu$ F - 0.33 $\mu$ F : 1000M $\Omega$ min. (20 °C , 25VDC , 60s)
	0.39 $\mu$ F - 1.0 $\mu$ F : 300M $\Omega$ · $\mu$ Fmin. (20 °C , 25VDC , 60s)
Soldering conditions	Reflow soldering : 250 °C max. and 30s max. at more than 220 °C (Temp. at cap. Surface)

### ■ Construction



### ■ Dimensions in mm (not to scale)

	$L \pm 0.2$ ( $L \pm 0.1$ )**	$W \pm 0.2$ ( $W \pm 0.1$ )**	$H \pm 0.2$ ( $H \pm 0.1$ )**		
	$e \pm 0.3$ ( $e \pm 0.25$ )* ( $e \pm 0.2$ )**	$g$	$e \pm 0.3$ ( $e \pm 0.25$ )* ( $e \pm 0.2$ )**		
Size code	L	W	H	e	g
K0	1.6	0.8	0.6	0.40	min.0.4
J1	2.0	1.25	0.8	0.45	min.0.6
J2	2.0	1.25	1.0	0.45	min.0.6
H1	3.2	1.6	0.8	0.65	min.1.0
H2	3.2	1.6	1.0	0.65	min.1.0
H3	3.2	1.6	1.4	0.65	min.1.0

\* To be applied only for size code J1 & J2  
\*\* To be applied only for size code K0

**\*The range of 0.010 $\mu$ F to 0.039 $\mu$ F is under development.(as of Jan-5,2004)**

■ Rating , Dimensions & quantity / Reel

● Capacitance tolerance :  $\pm 5\%$ (J),  $\pm 10\%$ (K),

Cap. ( $\mu\text{F}$ )	Part No.	Rated volt. 25VDC			Size code	Q'ty
		Dimensions (mm)				
		L	W	H		
0.01	ECPU1E103( )B5	1.6	0.8	0.6	K0	4000
0.012	ECPU1E123( )B5	1.6	0.8	0.6	K0	
0.015	ECPU1E153( )B5	1.6	0.8	0.6	K0	
0.018	ECPU1E183( )B5	1.6	0.8	0.6	K0	
0.022	ECPU1E223( )B5	1.6	0.8	0.6	K0	
0.027	ECPU1E273( )B5	1.6	0.8	0.6	K0	
0.033	ECPU1E333( )B5	1.6	0.8	0.6	K0	
0.039	ECPU1E393( )B5	1.6	0.8	0.6	K0	
0.047	ECPU1E473( )B5	2.0	1.25	0.8	J1	
0.056	ECPU1E563( )B5	2.0	1.25	0.8	J1	
0.068	ECPU1E683( )B5	2.0	1.25	0.8	J1	
0.082	ECPU1E823( )B5	2.0	1.25	0.8	J1	
0.1	ECPU1E104( )B5	2.0	1.25	1.0	J2	
0.12	ECPU1E124( )B5	2.0	1.25	1.0	J2	
0.15	ECPU1E154( )B5	2.0	1.25	1.0	J2	
0.18	ECPU1E184( )B5	3.2	1.6	0.8	H1	
0.22	ECPU1E224( )B5	3.2	1.6	0.8	H1	
0.27	ECPU1E274( )B5	3.2	1.6	0.8	H1	
0.33	ECPU1E334( )B5	3.2	1.6	0.8	H1	
0.39	ECPU1E394( )B5	3.2	1.6	0.8	H1	
0.47	ECPU1E474( )B5	3.2	1.6	1.0	H2	2000
0.56	ECPU1E564( )B5	3.2	1.6	1.0	H2	
0.68	ECPU1E684( )B5	3.2	1.6	1.4	H3	
0.82	ECPU1E824( )B5	3.2	1.6	1.4	H3	
1.0	ECPU1E105( )B5	3.2	1.6	1.4	H3	

► Example for Land Dimensions (mm)

Size code	Land dimensions Reflow soldering		
	A	B	C
K0	0.6	2.0	0.7
J1,J2	0.8	2.4	1.1
H1,H2,H3	1.8	3.6	1.4

\*The range of 0.010 $\mu\text{F}$  to 0.039 $\mu\text{F}$  is under development.(as of Jan-5,2004)