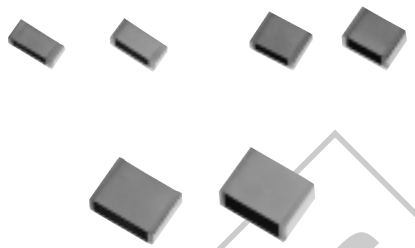
Film Chip Capacitor

Type: **ECWU(B)**



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

■Features
- ●Small in size (minimum size 3.2×1.6 mm)
- ●85˚C, 85%RH, W.V. ×1.0 for 500 hours
- ●Applicable for reflow soldering

■Recommended Applications
- ●Coupling
- ●By-pass
- ●General purpose

■Explanation of Part Numbers

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

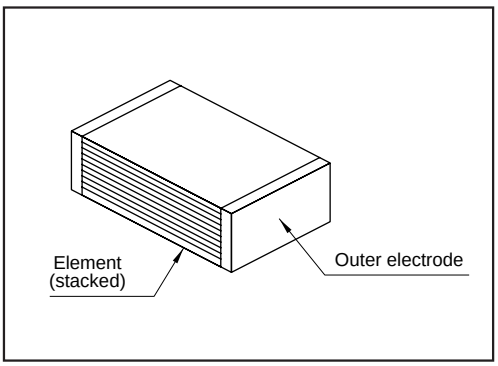
1C	16VDC
1H	50VDC
1	100VDC

	Tape width
5	8mm
9	12mm

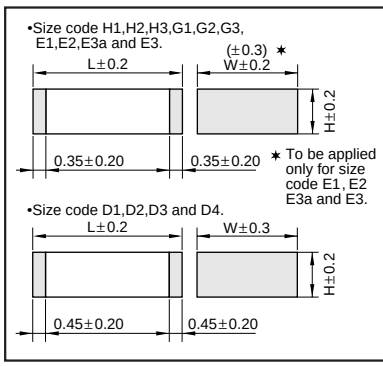
■Specifications

Category temp. range	−55 to +105˚C	
Rated voltage	16VDC, 50VDC, 100VDC	
Capacitance range	0.001 to 0.47μF	
Capacitance tolerance	±5% (J)	
Withstand voltage	Between terminals : Rated volt. (VDC)×175% 1 to 5s	
Dissipation factor	≦1.0% (20˚C 1kHz)	
Insulation resistance	C≦0.33μF	16VDC : ≧3000MΩ(20˚C, 10VDC 60s) 50VDC : ≧3000MΩ(20˚C, 50VDC 60s) 100VDC : ≧3000MΩ(20˚C, 100VDC 60s)
	C>0.33μF	16VDC : 1000MΩ . μF min. (20˚C, 10VDC 60s)
Soldering conditions	Reflow soldering : 240˚C max. and 30sec max. at more than 210˚C (Temp. at cap. surface)	

■Construction



■Dimensions in mm (not to scale)



Size code	L	W	H
H1	3.2	1.6	0.8
H2	3.2	1.6	1.0
H3	3.2	1.6	1.4
G1	3.2	2.5	1.0
G2	3.2	2.5	1.4
G3	3.2	2.5	2.0
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

Discontinuing Products

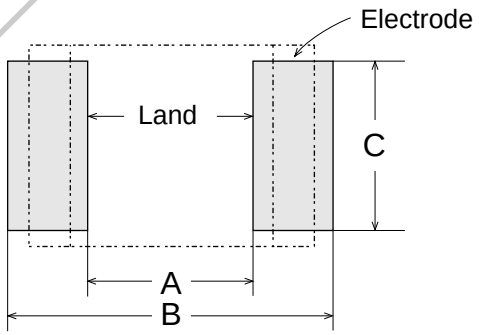
■Taping Specification for Automatic Insertion(Mounting)

Refer to the PDF file of taping specifications

■Rating, Dimensions & Quantity/Reel

Cap. (μF)	Rated volt. 16VDC						Rated volt. 50VDC						Rated volt. 100VDC					
	Part No.	Dimensions (mm)			Code	Q'ty	Part No.	Dimensions (mm)			Code	Q'ty	Part No.	Dimensions (mm)			Code	Q'ty
		L	W	H				L	W	H				L	W	H		
0.001	For this rating use type ECHU(B)						For this rating use type ECHU(B)						ECWU1102JB5	3.2	1.6	1.0	H2	3000
0.0012													ECWU1122JB5	3.2	1.6	1.0	H2	
0.0015													ECWU1152JB5	3.2	1.6	1.0	H2	
0.0018													ECWU1182JB5	3.2	1.6	1.0	H2	
0.0022													ECWU1222JB5	3.2	1.6	1.0	H2	
0.0027													ECWU1272JB5	3.2	1.6	1.0	H2	
0.0033							ECWU1H332JB5	3.2	1.6	0.8	H1	3000	ECWU1332JB5	3.2	1.6	1.4	H3	2000
0.0039							ECWU1H392JB5	3.2	1.6	0.8	H1		ECWU1392JB5	3.2	1.6	1.4	H3	
0.0047							ECWU1H472JB5	3.2	1.6	0.8	H1		ECWU1472JB5	3.2	1.6	1.4	H3	
0.0056							ECWU1H562JB5	3.2	1.6	0.8	H1		ECWU1562JB5	3.2	2.5	1.4	G2	
0.0068							ECWU1H682JB5	3.2	1.6	0.8	H1		ECWU1682JB5	3.2	2.5	1.4	G2	
0.0082							ECWU1H822JB5	3.2	1.6	1.0	H2		ECWU1822JB5	3.2	2.5	2.0	G3	
0.01							ECWU1H103JB5	3.2	1.6	1.0	H2		ECWU1103JB5	3.2	2.5	2.0	G3	
0.012	ECWU1C123JB5	3.2	1.6	1.0	H2	3000	ECWU1H123JB5	3.2	2.5	1.0	G1	2000	ECWU1123JC9	4.8	3.3	1.4	E1	3000
0.015	ECWU1C153JB5	3.2	1.6	1.0	H2		ECWU1H153JB5	3.2	2.5	1.0	G1		ECWU1153JC9	4.8	3.3	1.4	E1	
0.018	ECWU1C183JB5	3.2	1.6	1.0	H2		ECWU1H183JB5	3.2	2.5	1.4	G2		ECWU1183JC9	4.8	3.3	1.4	E1	
0.022	ECWU1C223JB5	3.2	1.6	1.0	H2		ECWU1H223JB5	3.2	2.5	1.4	G2		ECWU1223JC9	4.8	3.3	1.4	E1	
0.027	ECWU1C273JB5	3.2	1.6	1.0	H2		ECWU1H273JB5	3.2	2.5	1.4	G2		ECWU1273JC9	4.8	3.3	1.4	E1	
0.033	ECWU1C333JB5	3.2	1.6	1.4	H3	2000	ECWU1H333JB5	3.2	2.5	2.0	G3		ECWU1333JC9	4.8	3.3	1.4	E1	
0.039	ECWU1C393JB5	3.2	1.6	1.4	H3		ECWU1H393JB5	3.2	2.5	2.0	G3		ECWU1393JC9	4.8	3.3	2.0	E2	
0.047	ECWU1C473JB5	3.2	1.6	1.4	H3		ECWU1H473JB5	3.2	2.5	2.0	G3		ECWU1473JC9	4.8	3.3	2.0	E2	
0.056	ECWU1C563JB5	3.2	2.5	1.4	G2		ECWU1H563JC9	4.8	3.3	2.0	E2	3000						
0.068	ECWU1C683JB5	3.2	2.5	1.4	G2		ECWU1H683JC9	4.8	3.3	2.0	E2							
0.082	ECWU1C823JB5	3.2	2.5	2.0	G3		ECWU1H823JC9	4.8	3.3	2.4	E3a	2000						
0.1	ECWU1C104JB5	3.2	2.5	2.0	G3		ECWU1H104JC9	4.8	3.3	2.4	E3a							
0.12	ECWU1C124JC9	4.8	3.3	1.4	E1	3000	ECWU1H124JC9	6.0	4.1	1.8	D1	3000						
0.15	ECWU1C154JC9	4.8	3.3	2.0	E2		ECWU1H154JC9	6.0	4.1	2.0	D2							
0.18	ECWU1C184JC9	4.8	3.3	2.0	E2		ECWU1H184JC9	6.0	4.1	2.4	D3	2000						
0.22	ECWU1C224JC9	4.8	3.3	2.4	E3a	2000	ECWU1H224JC9	6.0	4.1	2.8	D4							
0.27	ECWU1C274JC9	6.0	4.1	1.8	D1	3000												
0.33	ECWU1C334JC9	6.0	4.1	2.0	D2													
0.39	ECWU1C394JC9	6.0	4.1	2.4	D3	2000												
0.47	ECWU1C474JC9	6.0	4.1	2.8	D4													

■Example for Land Dimensions (mm)



Cade	Land dimensions		
	Reflow soldering		
	A	B	C
H1	2.2	3.8	1.4
H2	2.2	3.8	1.4
H3	2.2	3.8	1.4
G1	2.2	3.8	2.3
G2	2.2	3.8	2.3
G3	2.2	3.8	2.3
E1	2.6	6.6	3.0
E2	2.6	6.6	3.0
E3a	2.6	6.6	3.0
E3	2.6	6.6	3.0
D1	3.8	7.8	3.8
D2	3.8	7.8	3.8
D3	3.8	7.8	3.8
D4	3.8	7.8	3.8

Discontinued Product