

Polyester Film Capacitor

Type: **ECQB(F)**

Designed for high density insertion applications

■Features

- Small in size
- Excellent electric characteristics in non-inductive construction
- RoHS directive compliant

■Recommended Applications

- General purpose



■Explanation of Part Numbers

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

50 VDC	63 VDC	100 VDC	200 VDC
1H	1J	1	2

±5 %	±10 %
J	K

Taping				lead	
Ammo		Reel		Type1	Type2
Straight	Crimped	Straight	Crimped		style N style T
4	3	5	9	Blank	W

●Explanation of Part Number for Odd Size Taping

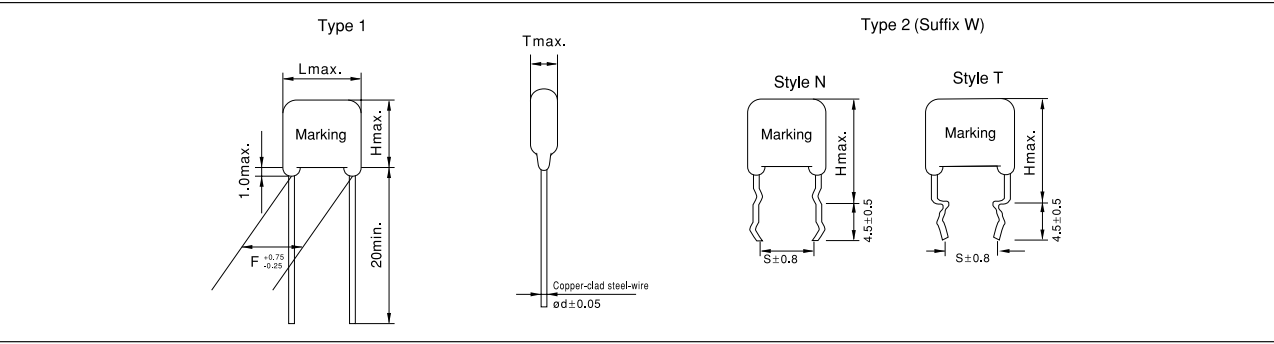
E	C	Q	B						R		F
Product code	Dielectric & construction		Rated voltage		Capacitance			7.5 mm Crimped lead	Cap. Tol.	Suffix	

■Specifications

Category temp. range (Including temperature-rise on unit surface)	−40 °C to +105 °C
Rated voltage	50 VDC, 63 VDC, 100 VDC, 200 VDC (Derating of rated voltage by 2.5 %/°C at more than 85 °C)
Capacitance range	0.00010 μF to 0.47 μF
Capacitance tolerance	±5 % (J), ±10 % (K) (0.00010 μF to 0.00039 μF/50 V, 63 VDC : ±10 % only)
Dissipation factor (tan δ)	tan δ ≤ 0.8 % (ECQB(F)100 VDC : tan δ ≤ 1.0 %) (20 °C, 1 kHz)
Withstand voltage	Between terminals : Rated voltage(VDC) × 250 % 1 s to 5 s
Insulation resistance (IR)	$C \leq 0.33 \mu F$: IR ≥ 30000 MΩ (20 °C, 50 VDC, 60 s : ECQB1H(F), ECQB1J(F)) $C > 0.33 \mu F$: IR ≥ 10000 MΩ · μF (20 °C, 100 VDC, 60 s : ECQB1(F), ECQB2(F))

* 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)

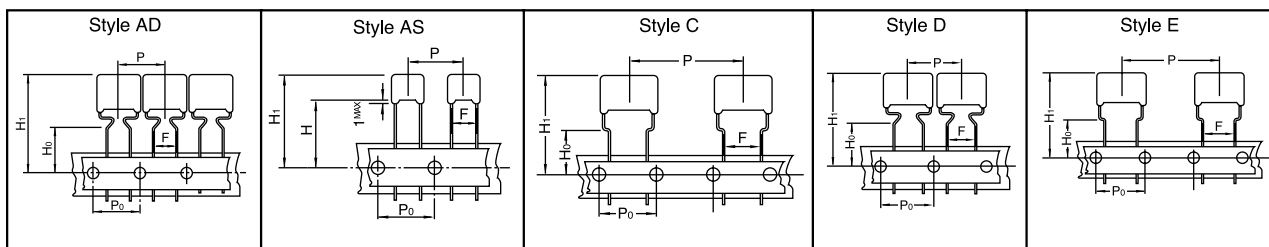


■ Packaging Specifications for Bulk Package

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	
ECQB (F)	50 VDC	0.00010 to 0.22	○						Ammo
		0.00010 to 0.10		○					Ammo
		0.00010 to 0.22	○						Reel
		0.00010 to 0.10		○					Reel
	63 VDC	0.00010 to 0.033	○	○					Ammo
		0.00010 to 0.033	○	○					Reel
		0.00010 to 0.12	○						Ammo
		0.00010 to 0.047		○					Ammo
	100 VDC	0.00010 to 0.10	○						Reel
		0.00010 to 0.047		○					Reel
		0.15 to 0.47				○			Ammo
	200 VDC	0.0010 to 0.033	○						Ammo
		0.0033 to 0.056					○		Ammo
		0.068 to 0.47						○	Ammo
		0.039 to 0.22				○			Ammo

● Lead Spacing

Style	Lead Spacing
AD	5.0 mm
AS	5.0 mm
C	5.0 mm
D	7.5 mm
E	7.5 mm

※ See the column "Rating, Dimensions & Quantity Box" for packing quantity.

■ Rating, Dimensions & Quantity/Ammo Box & Reel

● Type ECQB(F), Rated voltage:50 VDC, Capacitance tolerance: $\pm 5\%$ (J), $\pm 10\%$ (K)Only $\pm 10\%$ (K) is available from 0.00010 μF to 0.00039 μF

Part No.	Cap. (μF)	Dimensions (mm)							Quantity	
		L _{max.}	T _{max.}	H _{max.}		F	S	ϕd	Ammo	Reel
				Type 1	Type 2					
ECQB1H101KF()	0.00010	7.0	3.0	6.0	11.0	5.00	5.0	0.50	2000	2000
ECQB1H121KF()	0.00012	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H151KF()	0.00015	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H181KF()	0.00018	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H221KF()	0.00022	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H271KF()	0.00027	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H331KF()	0.00033	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H391KF()	0.00039	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H471 □F()	0.00047	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H561 □F()	0.00056	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H681 □F()	0.00068	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H821 □F()	0.00082	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H102 □F()	0.0010	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H122 □F()	0.0012	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H152 □F()	0.0015	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H182 □F()	0.0018	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H222 □F()	0.0022	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H272 □F()	0.0027	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H332 □F()	0.0033	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H392 □F()	0.0039	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H472 □F()	0.0047	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H562 □F()	0.0056	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H682 □F()	0.0068	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H822 □F()	0.0082	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H103 □F()	0.010	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H123 □F()	0.012	7.3	3.3	6.3	11.3	5.00	5.0	0.50		
ECQB1H153 □F()	0.015	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H183 □F()	0.018	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H223 □F()	0.022	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1H273 □F()	0.027	7.5	3.5	6.5	11.5	5.00	5.0	0.50		
ECQB1H333 □F()	0.033	7.5	3.5	6.5	11.5	5.00	5.0	0.50		
ECQB1H393 □F()	0.039	7.5	4.0	7.0	12.0	5.00	5.0	0.50		
ECQB1H473 □F()	0.047	7.5	4.0	7.0	12.0	5.00	5.0	0.50	1000	1000
ECQB1H563 □F()	0.056	8.0	4.3	7.5	12.5	5.00	5.0	0.50		
ECQB1H683 □F()	0.068	8.0	4.3	8.5	13.5	5.00	5.0	0.50		
ECQB1H823 □F()	0.082	8.0	4.5	8.5	13.5	5.00	5.0	0.50		
ECQB1H104 □F()	0.10	8.0	5.0	10.0	15.0	5.00	5.0	0.50		
ECQB1H124 □F()	0.12	11.0	5.0	9.5	14.5	7.50	5.0	0.60		
ECQB1H154 □F()	0.15	11.0	5.0	10.0	15.0	7.50	5.0	0.60		
ECQB1H184 □F()	0.18	11.0	5.5	10.5	15.5	7.50	5.0	0.60		
ECQB1H224 □F()	0.22	11.0	6.0	11.5	16.5	7.50	5.0	0.60	—	—
ECQB1H274 □F()	0.27	13.0	6.0	12.0	17.0	10.00	5.0	0.60		
ECQB1H334 □F()	0.33	13.0	6.5	13.0	18.0	10.00	5.0	0.60		
ECQB1H394 □F()	0.39	13.0	7.0	14.0	19.0	10.00	5.0	0.60		
ECQB1H474 □F()	0.47	13.0	7.5	14.5	19.5	10.00	5.0	0.60		

↑ Suffix for lead crimped or taped type
 — Cap. tol. code

Style N: 0.00010 μF to 0.10 μF
 Style T: 0.12 μF to 0.47 μF

■ Rating, Dimensions & Quantity/Ammo Box & Reel

● Type ECQB(F), Rated voltage: 63 VDC, Capacitance tolerance: $\pm 5\%$ (J), $\pm 10\%$ (K)

Only $\pm 10\%$ (K) is available from 0.00010 μF to 0.00039 μF

Part No.	Cap. (μF)	Dimensions (mm)							Quantity	
		L _{max.}	T _{max.}	H _{max.}		F	S	ϕd	Ammo	Reel
				Type 1	Type 2					
ECQB1J101KF()	0.00010	7.0	3.0	6.0	11.0	5.00	5.0	0.50	2000	2000
ECQB1J121KF()	0.00012	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J151KF()	0.00015	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J181KF()	0.00018	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J221KF()	0.00022	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J271KF()	0.00027	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J331KF()	0.00033	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J391KF()	0.00039	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J471 □F()	0.00047	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J561 □F()	0.00056	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J681 □F()	0.00068	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J821 □F()	0.00082	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J102 □F()	0.0010	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J122 □F()	0.0012	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J152 □F()	0.0015	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J182 □F()	0.0018	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J222 □F()	0.0022	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J272 □F()	0.0027	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J332 □F()	0.0033	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J392 □F()	0.0039	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J472 □F()	0.0047	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J562 □F()	0.0056	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J682 □F()	0.0068	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J822 □F()	0.0082	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J103 □F()	0.010	7.0	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J123 □F()	0.012	7.3	3.3	6.3	11.3	5.00	5.0	0.50		
ECQB1J153 □F()	0.015	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J183 □F()	0.018	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J223 □F()	0.022	7.5	3.0	6.0	11.0	5.00	5.0	0.50		
ECQB1J273 □F()	0.027	7.5	3.5	6.5	11.5	5.00	5.0	0.50		
ECQB1J333 □F()	0.033	7.5	3.5	6.5	11.5	5.00	5.0	0.50		

Suffix for lead crimped or taped type
 Cap. tol. code

Style N: 0.00010 μF to 0.033 μF

■ Rating, Dimensions & Quantity/Ammo Box & Reel

● Type ECQB(F), Rated voltage: 100 VDC, Capacitance tolerance: $\pm 5\%$ (J), $\pm 10\%$ (K)

Only $\pm 10\%$ (K) is available from 0.00010 μF to 0.00039 μF

Part No.	Cap. (μF)	Dimensions (mm)							Quantity			
		L ^{max.}	T ^{max.}	H ^{max.}		F		S	ød	Ammo	Reel	
				Type 1	Type 2	Type 1	Type 2					
ECQB1101KF()	0.00010	7.2	3.0	6.0	11.0	5.00	5.0	0.50	2000	2000		
ECQB1121KF()	0.00012	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1151KF()	0.00015	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1181KF()	0.00018	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1221KF()	0.00022	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1271KF()	0.00027	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1331KF()	0.00033	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1391KF()	0.00039	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1471□F()	0.00047	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1561□F()	0.00056	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1681□F()	0.00068	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1821□F()	0.00082	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1102□F()	0.0010	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1122□F()	0.0012	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1152□F()	0.0015	7.2	3.0	6.0	11.0	5.00	5.0	0.50				
ECQB1182□F()	0.0018	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1222□F()	0.0022	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1272□F()	0.0027	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1332□F()	0.0033	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1392□F()	0.0039	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1472□F()	0.0047	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1562□F()	0.0056	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1682□F()	0.0068	7.2	3.0	6.5	11.5	5.00	5.0	0.50				
ECQB1822□F()	0.0082	7.2	3.2	7.0	12.0	5.00	5.0	0.50				
ECQB1103□F()	0.010	7.2	3.2	7.0	12.0	5.00	5.0	0.50				
ECQB1123□F()	0.012	7.2	3.5	7.0	12.0	5.00	5.0	0.50				
ECQB1153□F()	0.015	7.2	4.0	7.5	12.5	5.00	5.0	0.50				
ECQB1183□F()	0.018	7.5	4.5	8.0	13.0	5.00	5.0	0.50	1000	1000		
ECQB1223□F()	0.022	7.5	4.5	9.0	14.0	5.00	5.0	0.50				
ECQB1273□F()	0.027	7.5	5.0	9.5	14.5	5.00	5.0	0.50				
ECQB1333□F()	0.033	7.5	5.5	10.0	15.0	5.00	5.0	0.50	500			
ECQB1393□F()	0.039	7.5	6.0	11.2	16.2	5.00	5.0	0.50				
ECQB1473□F()	0.047	7.5	6.5	11.8	16.8	5.00	5.0	0.50				
ECQB1563□F()	0.056	10.0	5.0	12.0	17.0	7.50	5.0	0.60				
ECQB1683□F()	0.068	10.0	5.5	12.4	17.4	7.50	5.0	0.60				
ECQB1823□F()	0.082	10.0	5.5	14.0	19.0	7.50	5.0	0.60				
ECQB1104□F()	0.10	10.5	6.0	14.6	19.6	7.50	5.0	0.60	500			
ECQB1124□F()	0.12	10.5	7.0	15.2	20.2	7.50	5.0	0.60				
ECQB1154□F()	0.15	13.0	7.0	13.8	18.8	10.00	5.0	0.60				
ECQB1184□F()	0.18	13.0	7.5	14.4	19.4	10.00	5.0	0.60				
ECQB1224□F()	0.22	13.0	8.0	15.2	20.2	10.00	5.0	0.60	400			
ECQB1274□F()	0.27	13.0	8.5	17.2	22.2	10.00	5.0	0.60				
ECQB1334□F()	0.33	13.0	9.0	18.0	23.0	10.00	5.0	0.60	300			
ECQB1394□F()	0.39	13.0	10.5	19.0	24.0	10.00	5.0	0.60				
ECQB1474□F()	0.47	13.0	11.5	19.2	24.2	10.00	5.0	0.60				

Suffix for lead crimped or taped type
 Cap. tol. code

Style N: 0.00010 μF to 0.047 μF
 Style T: 0.056 μF to 0.47 μF

■ Rating, Dimensions & Quantity/Ammo Box & Reel

● Type ECQB(F), Rated voltage: 200 VDC, Capacitance tolerance: $\pm 5\%$ (J), $\pm 10\%$ (K)

Part No.	Cap. (μF)	Dimensions (mm)							Quantity
		$L_{\text{max.}}$	$T_{\text{max.}}$	$H_{\text{max.}}$		F		S	Ammo
				Type 1	Type 2	Type 1	Type 2	ϕd	
ECQB2102□F()	0.0010	8.5	4.0	7.0	12.0	5.00	5.0	0.50	1000
ECQB2122□F()	0.0012	8.5	4.0	7.5	12.5	5.00	5.0	0.50	
ECQB2152□F()	0.0015	8.5	4.0	7.5	12.5	5.00	5.0	0.50	
ECQB2182□F()	0.0018	8.5	4.5	7.5	12.5	5.00	5.0	0.50	
ECQB2222□F()	0.0022	8.5	4.5	7.5	12.5	5.00	5.0	0.50	
ECQB2272□F()	0.0027	8.5	4.5	8.0	13.0	5.00	5.0	0.50	
ECQB2332□F()	0.0033	11.0	4.5	7.5	12.5	7.50	5.0	0.60	
ECQB2392□F()	0.0039	11.0	4.5	7.5	12.5	7.50	5.0	0.60	
ECQB2472□F()	0.0047	11.0	4.5	8.5	13.5	7.50	5.0	0.60	
ECQB2562□F()	0.0056	11.0	4.5	8.5	13.5	7.50	5.0	0.60	
ECQB2682□F()	0.0068	11.0	4.5	9.0	14.0	7.50	5.0	0.60	
ECQB2822□F()	0.0082	11.0	4.5	9.0	14.0	7.50	5.0	0.60	
ECQB2103□F()	0.010	11.0	4.5	10.0	15.0	7.50	5.0	0.60	
ECQB2123□F()	0.012	11.0	5.0	10.5	15.5	7.50	5.0	0.60	
ECQB2153□F()	0.015	11.0	5.5	10.5	15.5	7.50	5.0	0.60	
ECQB2183□F()	0.018	11.0	5.5	10.0	15.0	7.50	5.0	0.60	500
ECQB2223□F()	0.022	11.0	6.0	10.5	15.5	7.50	5.0	0.60	
ECQB2273□F()	0.027	11.0	6.5	11.5	16.5	7.50	5.0	0.60	
ECQB2333□F()	0.033	11.0	7.0	12.0	17.0	7.50	5.0	0.60	800
ECQB2393□F()	0.039	13.5	5.0	12.5	17.5	10.00	7.5	0.60	
ECQB2473□F()	0.047	13.5	5.5	13.0	18.0	10.00	7.5	0.60	
ECQB2563□F()	0.056	13.5	6.0	13.5	18.5	10.00	7.5	0.60	500
ECQB2683□F()	0.068	16.0	5.5	13.0	18.0	12.50	10.0	0.60	
ECQB2823□F()	0.082	16.0	6.0	13.5	18.5	12.50	10.0	0.60	
ECQB2104□F()	0.10	16.0	7.0	14.5	19.5	12.50	10.0	0.60	
ECQB2124□F()	0.12	19.0	6.5	16.0	21.0	15.00	12.5	0.60	
ECQB2154□F()	0.15	19.0	7.5	17.0	22.0	15.00	12.5	0.60	
ECQB2184□F()	0.18	19.0	8.0	17.5	22.5	15.00	12.5	0.60	400
ECQB2224□F()	0.22	19.0	9.0	18.5	23.5	15.00	12.5	0.60	
ECQB2274□F()	0.27	24.0	8.0	17.5	22.5	20.00	15.0	0.80	
ECQB2334□F()	0.33	24.0	9.0	18.5	23.5	20.00	15.0	0.80	—
ECQB2394□F()	0.39	24.0	10.0	19.5	24.5	20.00	15.0	0.80	
ECQB2474□F()	0.47	24.0	11.5	20.5	25.5	20.00	15.0	0.80	

— Suffix for lead crimped or taped type
 — Cap. tol. code

Style N: 0.0010 μF to 0.0027 μF
 Style T: 0.0033 μF to 0.47 μF