

Metallized Polyester Film Capacitor

Series : **ECQE(T)**



Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating

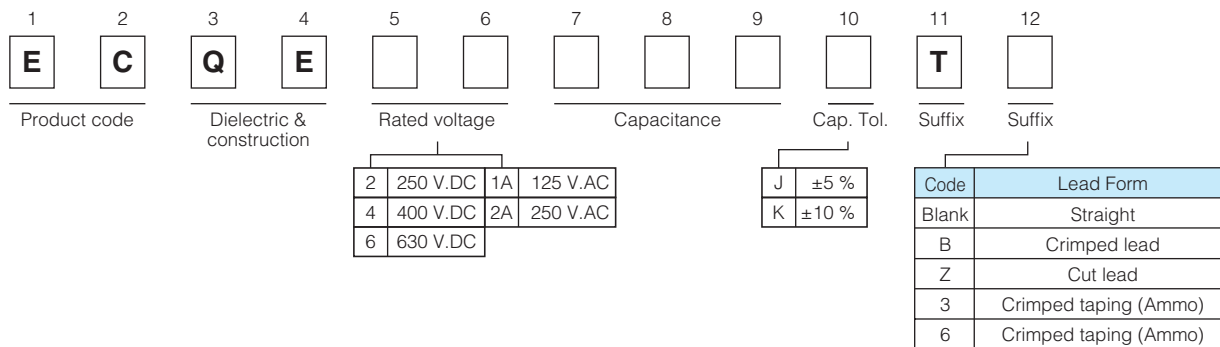
Features

- Self-healing property
- Excellent electrical characteristics
- Flame retardant epoxy resin coating
- Moisture resistance 85 °C, 85 % RH for 500 hours
- RoHS directive compliant

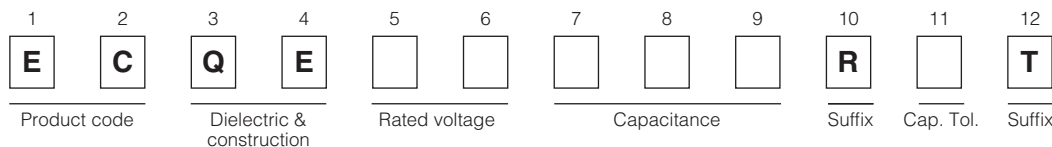
Recommended applications

- General purpose usage
 - * Please contact us when applications are CDI , ignitor etc.

Explanation of part number



- Odd size taping

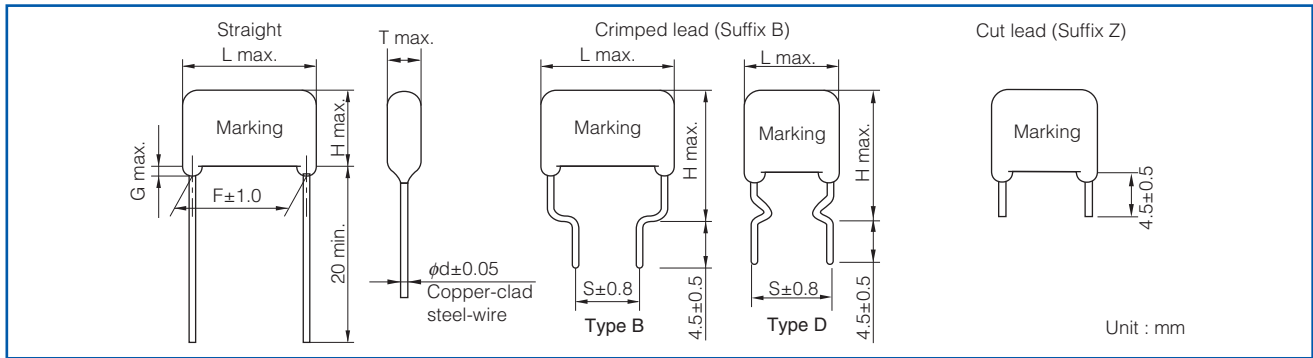


Specifications

Category temp. range (Including temperature-rise on unit surface)	250 V.DC, 400 V.DC, 630 V.DC	- 40 °C to +105 °C
	125 V.AC, 250 V.AC	- 40 °C to +105 °C
Rated voltage	250 V.DC, 400 V.DC, 630 V.DC (Derating of rated voltage by 1.25 %/°C at more than 85 °C) 125 V.AC, 250 V.AC	
Capacitance range	250 V.DC	0.010 μF to 10.0 μF (E12)
	400 V.DC	0.010 μF to 2.2 μF (E12)
	630 V.DC	0.010 μF to 2.2 μF (E12)
	125 V.AC	0.010 μF to 0.47 μF (E12)
	250 V.AC	0.010 μF to 0.47 μF (E12)
Capacitance tolerance	±5 % (J), ±10 % (K)	
Dissipation factor (tan δ)	tan δ ≤ 1.0 % (20 °C, 1 kHz)	
Withstand voltage	• Rated volt. : 250 V.DC to 630 V.DC Between terminals : Rated volt. (V.DC) × 150 %, 60 s	
	• Rated volt. : 125 V.AC, 250 V.AC Between terminals : Rated volt. (V.AC) × 230 %, 60 s Between terminals to enclosure : 1500 V.AC, 60 s	
Insulation resistance (IR)	250 V.DC to 630 V.DC : C ≤ 0.33 μF : IR ≥ 9000 MΩ C > 0.33 μF : IR ≥ 3000 MΩ · μF (20 °C, 100 V.DC, 60 s)	
	125 V.AC, 250 V.AC : IR ≥ 2000 MΩ (20 °C, 500 V.DC, 60 s)	

* 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".
 * Voltage to be applied to ECQE1A (T) & ECQE2A (T) is only sine wave (50 Hz or 60 Hz).

Dimensions

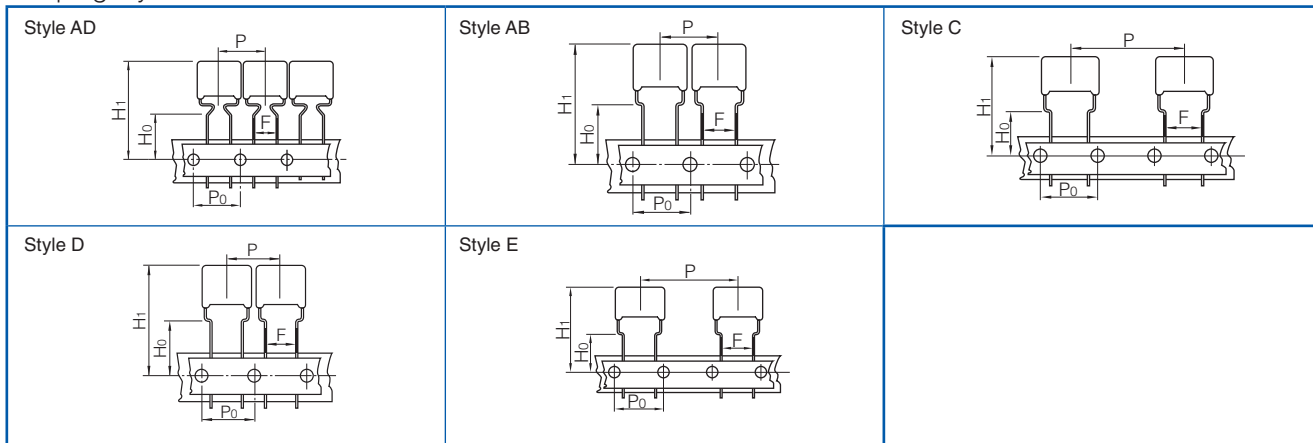


Packaging specifications for bulk package

- Packing quantity : 100 pcs./bag

Taping specifications for automatic insertion

- Taping style



* Refer to the page of taping specifications.

- Packaging specifications

Series	Rated voltage	Capacitance range (μF)	Taping style					Packing	suffix
			AD	AB	C	D	E		
ECQE(T)	250 V.DC	0.010 to 0.15	○					Ammo	() T3
		0.18 to 0.33			○			Ammo	() T3
		0.39 to 1.5			○			Ammo	() T3
		0.010 to 0.33				○		Ammo	R() T
		0.39 to 1.5					○	Ammo	R() T
	400 V.DC	0.010 to 0.033	○					Ammo	() T3
		0.039 to 0.10			○			Ammo	() T3
		0.12 to 0.47			○			Ammo	() T3
		0.010 to 0.10				○		Ammo	R() T
		0.12 to 0.47					○	Ammo	R() T
	630 V.DC	0.010 to 0.047			○			Ammo	() T3
		0.056 to 0.22			○			Ammo	() T3
		0.010 to 0.047				○		Ammo	R() T
		0.056 to 0.22					○	Ammo	R() T
	125 V.AC	0.27 to 0.47			○			Ammo	() T3
		0.010 to 0.10		○				Ammo	() T6
0.12 to 0.22				○			Ammo	() T6	
0.010 to 0.22					○		Ammo	R() T	
250 V.AC	0.27 to 0.47					○	Ammo	R() T	
	0.056 to 0.22			○		○	Ammo	() T3	
	0.010 to 0.047			○			Ammo	() T6	
	0.010 to 0.047				○		Ammo	R() T	
	0.056 to 0.22					○	Ammo	R() T	

- Lead spacing

Style	Lead spacing
AD	5.0 mm
AB	5.0 mm
C	5.0 mm
D	7.5 mm
E	7.5 mm

* See the column "Rating · Dimensions · Quantity" for packing quantity

Rating · Dimensions · Quantity

● Rated voltage : 250 V.DC, Capacitance tolerance : ± 5 % (J), ±10 % (K)

Part No.	Cap. (μ F)	Dimensions (mm)								Min. order Q'ty						
		L max.	T max.	H max.		F		S		G max.	ϕ d	Taping			Bulk	
				Straight	Crimped lead	Straight	Crimped lead	Straight	Crimped lead			Straight	Crimped lead	Straight	Crimped lead	
ECQE2103□T()	0.010	10.8	4.3	7.4	12.4	7.5	7.5	1.0	0.6	1500	-	-	-	1800	500	500
ECQE2123□T()	0.012	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2153□T()	0.015	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2183□T()	0.018	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2223□T()	0.022	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2273□T()	0.027	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2333□T()	0.033	10.8	4.5	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2393□T()	0.039	10.8	4.5	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2473□T()	0.047	10.8	4.5	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2563□T()	0.056	10.8	4.8	7.9	12.9	7.5	7.5	1.0	0.6					1600		
ECQE2683□T()	0.068	10.8	4.5	7.5	12.5	7.5	7.5	1.0	0.6					1700		
ECQE2823□T()	0.082	10.8	4.9	8.0	13.0	7.5	7.5	1.0	0.6					1500		
ECQE2104□T()	0.10	10.8	5.8	8.4	13.4	7.5	7.5	1.0	0.6					1300		
ECQE2124□T()	0.12	10.8	6.0	9.0	14.0	7.5	7.5	1.0	0.6					1200		
ECQE2154□T()	0.15	10.8	6.0	10.8	15.8	7.5	7.5	1.0	0.6					1200		
ECQE2184□T()	0.18	12.5	5.0	10.3	15.3	10.0	10.0	1.0	0.6	800	1400					
ECQE2224□T()	0.22	12.5	5.5	10.5	15.5	10.0	10.0	1.0	0.6	800	1300					
ECQE2274□T()	0.27	12.5	6.0	11.5	16.5	10.0	10.0	1.0	0.6	700	1200					
ECQE2334□T()	0.33	12.5	6.5	12.0	17.0	10.0	10.0	1.0	0.6	600	1100					
ECQE2394□T()	0.39	19.0	4.9	12.0	17.0	15.0	10.0	1.0	0.6	800	700					
ECQE2474□T()	0.47	19.0	5.3	12.5	17.5	15.0	10.0	1.0	0.6	700	600					
ECQE2564□T()	0.56	19.0	5.5	13.0	18.0	15.0	10.0	1.0	0.6	800						
ECQE2684□T()	0.68	19.0	6.0	13.5	18.5	15.0	10.0	1.0	0.8	700	500					
ECQE2824□T()	0.82	19.0	6.5	14.5	19.5	15.0	10.0	1.0	0.8	600						
ECQE2105□T()	1.0	19.0	7.4	15.0	20.0	15.0	10.0	1.0	0.8	500	400					
ECQE2125□T()	1.2	19.0	8.0	15.9	20.9	15.0	10.0	1.0	0.8							
ECQE2155□T()	1.5	19.0	9.0	16.8	21.8	15.0	10.0	1.0	0.8	400	-	-				
ECQE2185□T()	1.8	26.5	7.5	15.5	20.5	22.5	15.0	1.0	0.8							
ECQE2225□T()	2.2	26.5	8.5	16.3	21.3	22.5	15.0	1.0	0.8							
ECQE2275□T()	2.7	26.5	9.4	17.0	22.0	22.5	15.0	1.0	0.8							
ECQE2335□T()	3.3	26.5	10.3	18.0	23.0	22.5	15.0	1.5	0.8							
ECQE2395□T()	3.9	26.5	11.0	20.5	25.5	22.5	15.0	1.5	0.8							
ECQE2475□T()	4.7	26.5	12.0	21.5	26.5	22.5	15.0	1.5	0.8							
ECQE2565□T()	5.6	31.5	11.8	21.0	26.0	27.5	22.5	1.5	0.8							
ECQE2685□T()	6.8	31.5	13.0	22.4	27.4	27.5	22.5	1.5	0.8							
ECQE2825□T()	8.2	31.5	14.3	23.5	28.5	27.5	22.5	1.5	0.8	400						
ECQE2106□T()	10.0	31.5	15.9	25.8	30.8	27.5	22.5	1.5	0.8	300			400			

* □ : Capacitance tolerance code
() : Suffix for lead crimped or taped type

Type D : 0.010 μ F to 0.33 μ F
Type B : 0.39 μ F to 10.0 μ F

Rating · Dimensions · Quantity

● Rated voltage : 400 V.DC, Capacitance tolerance : ± 5 % (J), ±10 % (K)

Part No.	Cap. (μ F)	Dimensions (mm)								Min. order Q'ty					
		L max.	T max.	H max.		F		S		G max.	ϕ d	Taping			Bulk Straight · Crimped lead
				Straight	Crimped lead	Straight	Crimped lead	Straight	Crimped lead			Standard 5 mm	Odd size 5 mm	Odd size 7.5 mm	
ECQE4103□()	0.010	10.8	4.3	7.4	12.4	7.5	7.5	1.0	0.6	1500	-	1800	500	Straight · Crimped lead	
ECQE4123□()	0.012	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6						
ECQE4153□()	0.015	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6						
ECQE4183□()	0.018	10.8	4.4	7.5	12.5	7.5	7.5	1.0	0.6						
ECQE4223□()	0.022	10.8	4.8	7.9	12.9	7.5	7.5	1.0	0.6						
ECQE4273□()	0.027	10.8	5.5	8.0	13.0	7.5	7.5	1.0	0.6						
ECQE4333□()	0.033	10.8	6.0	9.0	14.0	7.5	7.5	1.0	0.6						
ECQE4393□()	0.039	12.5	4.9	8.0	13.0	10.0	10.0	1.0	0.6						
ECQE4473□()	0.047	12.5	5.0	8.3	13.3	10.0	10.0	1.0	0.6						
ECQE4563□()	0.056	12.5	5.0	10.0	15.0	10.0	10.0	1.0	0.6						
ECQE4683□()	0.068	12.5	5.4	10.5	15.5	10.0	10.0	1.0	0.6						
ECQE4823□()	0.082	12.5	5.8	11.0	16.0	10.0	10.0	1.0	0.6						
ECQE4104□()	0.10	12.5	6.3	12.0	17.0	10.0	10.0	1.0	0.6						
ECQE4124□()	0.12	19.0	5.0	10.0	15.0	10.0	10.0	1.0	0.6						
ECQE4154□()	0.15	19.0	5.0	12.4	17.4	15.0	10.0	1.0	0.6						
ECQE4184□()	0.18	19.0	5.4	12.5	17.5	15.0	10.0	1.0	0.6						
ECQE4224□()	0.22	19.0	5.9	13.0	18.0	15.0	10.0	1.0	0.6						
ECQE4274□()	0.27	19.0	6.5	14.3	19.3	15.0	10.0	1.0	0.8						
ECQE4334□()	0.33	19.0	7.0	14.9	19.9	15.0	10.0	1.0	0.8						
ECQE4394□()	0.39	19.0	7.5	15.4	20.4	15.0	10.0	1.0	0.8						
ECQE4474□()	0.47	19.0	7.8	17.0	22.0	15.0	10.0	1.0	0.8						
ECQE4564□()	0.56	26.5	6.5	16.0	21.0	22.5	15.0	1.0	0.8						
ECQE4684□()	0.68	26.5	7.0	16.5	21.5	22.5	15.0	1.0	0.8						
ECQE4824□()	0.82	26.5	7.9	17.3	22.3	22.5	15.0	1.0	0.8						
ECQE4105□()	1.0	26.5	8.5	18.0	23.0	22.5	15.0	1.0	0.8						
ECQE4125□()	1.2	26.5	9.5	18.9	23.9	22.5	15.0	1.0	0.8						
ECQE4155□()	1.5	31.5	9.5	19.0	24.0	27.5	22.5	1.0	0.8						
ECQE4185□()	1.8	31.5	11.0	20.5	25.5	27.5	22.5	1.5	0.8						
ECQE4225□()	2.2	31.5	11.0	22.0	27.0	27.5	22.5	1.5	0.8						

* □ : Capacitance tolerance code
() : Suffix for lead crimped or taped type

Type D : 0.010 μ F to 0.10 μ F
Type B : 0.12 μ F to 2.2 μ F

● Rated voltage : 630 V.DC, Capacitance tolerance : ± 5 % (J), ±10 % (K)

Part No.	Cap. (μ F)	Dimensions (mm)								Min. order Q'ty					
		L max.	T max.	H max.		F		S		G max.	ϕ d	Taping		Bulk	
				Straight	Crimped lead	Straight	Crimped lead	Straight	Crimped lead			Odd size 5 mm	Odd size 7.5 mm	Straight	Crimped lead
ECQE6103□()	0.010	12.5	4.5	7.5	12.5	10.0	10.0	1.0	0.6	900	1600	500	500	Straight · Crimped lead	
ECQE6123□()	0.012	12.5	4.5	7.8	12.8	10.0	10.0	1.0	0.6						
ECQE6153□()	0.015	12.5	5.0	8.2	13.2	10.0	10.0	1.0	0.6						
ECQE6183□()	0.018	12.5	4.9	10.0	15.0	10.0	10.0	1.0	0.6						
ECQE6223□()	0.022	12.5	5.3	10.5	15.5	10.0	10.0	1.0	0.6						
ECQE6273□()	0.027	12.5	5.5	10.9	15.9	10.0	10.0	1.0	0.6						
ECQE6333□()	0.033	12.5	6.0	11.9	16.9	10.0	10.0	1.0	0.6						
ECQE6393□()	0.039	12.5	6.0	13.4	18.4	10.0	10.0	1.0	0.6						
ECQE6473□()	0.047	12.5	6.5	13.5	18.5	10.0	10.0	1.0	0.6						
ECQE6563□()	0.056	19.0	5.4	10.5	15.5	15.0	10.0	1.0	0.6						
ECQE6683□()	0.068	19.0	5.8	11.0	16.0	15.0	10.0	1.0	0.6						
ECQE6823□()	0.082	19.0	6.5	12.0	17.0	15.0	10.0	1.0	0.6						
ECQE6104□()	0.10	19.0	6.3	14.0	19.0	15.0	10.0	1.0	0.6						
ECQE6124□()	0.12	19.0	6.3	14.5	19.5	15.0	10.0	1.0	0.8						
ECQE6154□()	0.15	19.0	7.5	15.4	20.4	15.0	10.0	1.0	0.8						
ECQE6184□()	0.18	19.0	8.0	16.0	21.0	15.0	10.0	1.0	0.8						
ECQE6224□()	0.22	19.0	9.0	16.5	21.5	15.0	10.0	1.0	0.8						
ECQE6274□()	0.27	26.5	7.0	16.5	21.5	22.5	15.0	1.0	0.8						
ECQE6334□()	0.33	26.5	7.8	17.0	22.0	22.5	15.0	1.0	0.8						
ECQE6394□()	0.39	26.5	8.5	17.9	22.9	22.5	15.0	1.0	0.8						
ECQE6474□()	0.47	26.5	9.3	18.5	23.5	22.5	15.0	1.0	0.8						
ECQE6564□()	0.56	26.5	10.0	20.0	25.0	22.5	15.0	1.5	0.8						
ECQE6684□()	0.68	26.5	11.5	21.0	26.0	22.5	15.0	1.5	0.8						
ECQE6824□()	0.82	31.5	11.3	20.5	25.5	27.5	22.5	1.5	0.8						
ECQE6105□()	1.0	31.5	12.5	21.9	26.9	27.5	22.5	1.5	0.8						
ECQE6125□()	1.2	31.5	13.5	23.0	28.0	27.5	22.5	1.5	0.8						
ECQE6155□()	1.5	31.5	15.3	24.7	29.7	27.5	22.5	1.5	0.8						
ECQE6185□()	1.8	31.5	16.8	27.0	32.0	27.5	22.5	1.5	0.8						
ECQE6225□()	2.2	31.5	19.5	29.0	34.0	27.5	22.5	1.5	0.8						

* □ : Capacitance tolerance code
() : Suffix for lead crimped or taped type

Type D : 0.010 μ F to 0.047 μ F
Type B : 0.056 μ F to 2.2 μ F

Rating · Dimensions · Quantity

- Rated voltage : 125 V.AC, Capacitance tolerance : $\pm 5\%$ (J), $\pm 10\%$ (K)
Noise suppression Capacitors (Across-the-line)

Part No.	Cap. (μ F)	Dimensions (mm)								Min. order Q'ty				
		L max.	T max.	H max.		F		S	G max.	ϕ d	Taping			Bulk Straight · Crimped lead
				Straight	Crimped lead	Straight	Crimped lead	Straight	Standard 5 mm		Odd size 5 mm	Odd size 7.5 mm		
ECQE1A103□□()	0.010	11.0	4.5	7.5	12.5	7.5	7.5	1.0	0.6	1500	-	1700	500	
ECQE1A123□□()	0.012	11.0	4.4	7.5	12.5	7.5	7.5	1.0	0.6					
ECQE1A153□□()	0.015	11.0	4.4	7.5	12.5	7.5	7.5	1.0	0.6					
ECQE1A183□□()	0.018	11.0	4.4	7.5	12.5	7.5	7.5	1.0	0.6					
ECQE1A223□□()	0.022	11.0	4.4	7.5	12.5	7.5	7.5	1.0	0.6					
ECQE1A273□□()	0.027	11.0	4.4	7.5	12.5	7.5	7.5	1.0	0.6					
ECQE1A333□□()	0.033	11.0	4.5	7.8	12.8	7.5	7.5	1.0	0.6					
ECQE1A393□□()	0.039	11.0	4.5	7.8	12.8	7.5	7.5	1.0	0.6					
ECQE1A473□□()	0.047	11.0	5.5	8.0	13.0	7.5	7.5	1.0	0.6					
ECQE1A563□□()	0.056	11.0	5.9	8.5	13.5	7.5	7.5	1.0	0.6					
ECQE1A683□□()	0.068	11.0	6.3	9.4	14.4	7.5	7.5	1.0	0.6					
ECQE1A823□□()	0.082	11.0	6.5	9.8	14.8	7.5	7.5	1.0	0.6					
ECQE1A104□□()	0.10	11.0	6.5	11.8	16.8	7.5	7.5	1.0	0.6					
ECQE1A124□□()	0.12	13.0	5.9	11.5	16.5	10.0	10.0	1.0	0.6					
ECQE1A154□□()	0.15	13.0	6.5	12.0	17.0	10.0	10.0	1.0	0.6					
ECQE1A184□□()	0.18	13.0	7.0	12.5	17.5	10.0	10.0	1.0	0.6					
ECQE1A224□□()	0.22	13.0	7.5	13.4	18.4	10.0	10.0	1.0	0.6					
ECQE1A274□□()	0.27	19.0	6.3	12.0	17.0	15.0	10.0	1.0	0.6					
ECQE1A334□□()	0.33	19.0	6.9	12.5	17.5	15.0	10.0	1.0	0.6					
ECQE1A394□□()	0.39	19.0	7.4	13.0	18.0	15.0	10.0	1.0	0.6					
ECQE1A474□□()	0.47	19.0	7.5	15.3	20.3	15.0	10.0	1.0	0.6					

* □ : Capacitance tolerance code
() : Suffix for lead crimped or taped type

Type D : 0.010 μ F to 0.22 μ F
Type B : 0.27 μ F to 0.47 μ F

- Rated voltage : 250 V.AC, Capacitance tolerance : $\pm 5\%$ (J), $\pm 10\%$ (K)
Noise suppression Capacitors (Across-the-line)

Part No.	Cap. (μ F)	Dimensions (mm)								Min. order Q'ty				
		L max.	T max.	H max.		F		S	G max.	ϕ d	Taping			Bulk Straight · Crimped lead
				Straight	Crimped lead	Straight	Crimped lead	Straight	Odd size 5 mm		Odd size 7.5 mm	Odd size 7.5 mm		
ECQE2A103□□()	0.010	13.0	5.5	10.8	15.8	10.0	10.0	1.0	0.6	700	1200	500		
ECQE2A123□□()	0.012	13.0	6.0	11.5	16.5	10.0	10.0	1.0	0.6					
ECQE2A153□□()	0.015	13.0	6.3	9.9	14.9	10.0	10.0	1.0	0.6					
ECQE2A183□□()	0.018	13.0	6.0	11.9	16.9	10.0	10.0	1.0	0.6					
ECQE2A223□□()	0.022	13.0	6.0	11.5	16.5	10.0	10.0	1.0	0.6					
ECQE2A273□□()	0.027	13.0	5.5	10.9	15.9	10.0	10.0	1.0	0.6					
ECQE2A333□□()	0.033	13.0	6.0	11.9	16.9	10.0	10.0	1.0	0.6					
ECQE2A393□□()	0.039	13.0	6.0	13.4	18.4	10.0	10.0	1.0	0.6					
ECQE2A473□□()	0.047	13.0	6.5	14.4	19.4	10.0	10.0	1.0	0.6					
ECQE2A563□□()	0.056	19.0	5.4	10.5	15.5	15.0	10.0	1.0	0.6					
ECQE2A683□□()	0.068	19.0	5.8	11.0	16.0	15.0	10.0	1.0	0.6					
ECQE2A823□□()	0.082	19.0	6.3	12.0	17.0	15.0	10.0	1.0	0.6					
ECQE2A104□□()	0.10	19.0	6.3	14.0	19.0	15.0	10.0	1.0	0.6					
ECQE2A124□□()	0.12	19.0	6.8	14.5	19.5	15.0	10.0	1.0	0.8					
ECQE2A154□□()	0.15	19.0	7.5	15.4	20.4	15.0	10.0	1.0	0.8					
ECQE2A184□□()	0.18	19.0	8.0	16.0	21.0	15.0	10.0	1.0	0.8					
ECQE2A224□□()	0.22	19.0	9.0	16.9	21.9	15.0	10.0	1.0	0.8					
ECQE2A274□□()	0.27	26.5	7.0	16.5	21.5	22.5	15.0	1.0	0.8					
ECQE2A334□□()	0.33	26.5	7.8	17.0	22.0	22.5	15.0	1.0	0.8					
ECQE2A394□□()	0.39	26.5	8.5	17.9	22.9	22.5	15.0	1.0	0.8					
ECQE2A474□□()	0.47	26.5	9.3	18.5	23.5	22.5	15.0	1.0	0.8					

* □ : Capacitance tolerance code
() : Suffix for lead crimped or taped type

Type D : 0.010 μ F to 0.047 μ F
Type B : 0.056 μ F to 0.47 μ F

Notice for AC rated

AC rated capacitors complying with clause 1 of "Electrical Appliance and Material Safety Law".

As for clause 2 of "Electrical Appliance and Material Safety Law", please use ECQUA type or ECQUL type.

When using these capacitors as a across-the-line capacitor, it shall be required to follow either item 1. or item 2. condition.

1. Capacitor shall be connected in parallel with varistor (Specified varistor voltage in table 1.)
2. Voltage applied for capacitor shall not exceed other than specified in table 1, when using these capacitors.

Table 1

Capacitor rated voltage	Varistor voltage	Pulse voltage
125 V.AC	250 V	250 V _{D,P}
250 V.AC	470 V	630 V _{D,P}

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