Metallized Polyester Film Capacitor

Type : ECQE(B)

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

Features

- Self-healing property
- Small size
- Excellent electrical characteristics
- Flame retardant epoxy resin coating
- RoHS directive compliant

Recommended applications

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

Explanation of part number

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

2	250 V.DC
1A	125 V.AC

J	±5 %
K	±10 %

Code	Lead Form
Blank	Straight
B	Crimped lead
Z	Cut lead
2	Straight taping (Ammo)
3	Crimped taping (Ammo)
6	Crimped taping (Ammo)

- Odd size taping

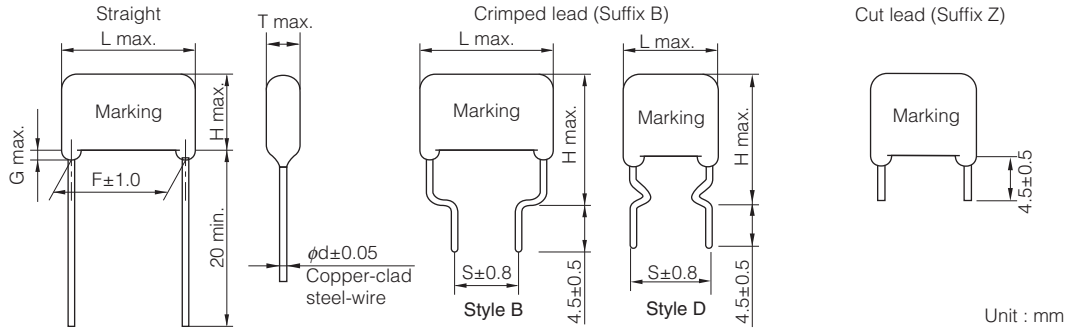
1	2	3	4	5	6	7	8	9	10	11	12
E	C	Q	E						R		B
Product code		Dielectric & construction		Rated voltage		Capacitance			Suffix	Cap. Tol.	Suffix

Specifications

Category temp. range (Including temperature-rise on unit surface)	250 V.DC	– 40 °C to +105 °C
	125 V.AC	– 40 °C to +105 °C
Rated voltage	250 V.DC, 125 V.AC (250 V.DC : Derating of rated voltage by 1.25 %/°C at more than 85 °C)	
Capacitance range	0.010 µF to 4.7 µF	
Capacitance tolerance	±5 %(J), ±10 %(K)	
Dissipation factor (tan δ)	tan $\delta \leqq$ 1.0 % (20 °C, 1 kHz)	
Withstand voltage	• Rated volt. : 250 V.DC Between terminals : Rated volt. (V.DC)×150 %, 60 s	
	• Rated volt. : 125 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	C ≦ 0.33 µF : IR ≧ 9000 MΩ (20 °C, 100 V.DC, 60 s) C > 0.33 µF : IR ≧ 3000 MΩ · µF (20 °C, 100 V.DC, 60 s)
	125 V.AC	C ≦ 0.47 µF : IR ≧ 2000 MΩ (20 °C, 500 V.DC, 60 s) C > 0.47 µF : IR ≧ 3000 MΩ · µF (20 °C, 100 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 (B) is only sine wave (50 Hz or 60 Hz).

Dimensions

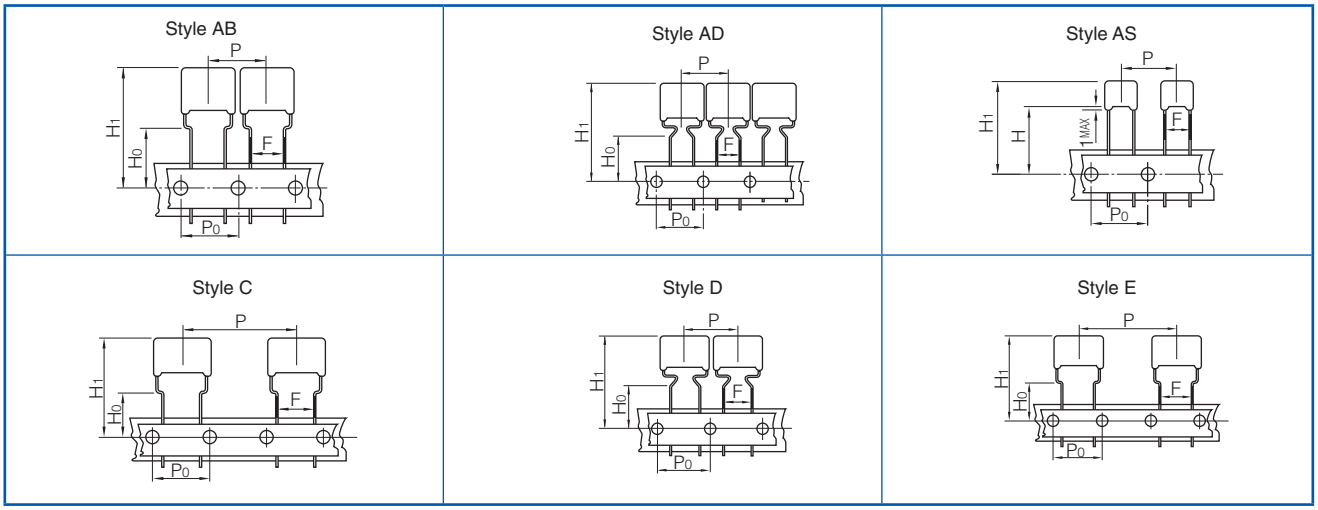


Packaging specifications for bulk package

● Packing quantity : 100 pcs./bag

Taping specifications for automatic insertion

● Taping style



✻ Refer to the page of taping specifications.

● Packaging specifications

Type	Rated voltage	Capacitance range (μF)	Taping style							Packing	suffix
			AD	AS	AB	B	C	D	E		
ECQE(B)	250 V.DC	0.010 to 0.15		○						Ammo	( ) B2
		0.010 to 0.68	○							Ammo	( ) B3
		0.82 to 1.5					○			Ammo	( ) B3
		0.18 to 0.68						○		Ammo	R( ) B
		0.82 to 4.7							○	Ammo	R( ) B
	125 V.AC	0.010 to 0.068		○						Ammo	( ) B2
		0.082 to 0.22			○					Ammo	( ) B6
		0.27 to 2.7					○			Ammo	( ) B3
		0.082 to 0.68						○		Ammo	R( ) B
		0.82 to 2.7							○	Ammo	R( ) B

● Lead spacing

Style	Lead spacing
AD	5.0 mm
AS	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. (μF)	Dimensions (mm)							Min. order Q'ty			
		L max.	T max.	H max.		F	S	φd	Taping			Bulk
				Straight	Crimped lead	Straight	Crimped lead		Standard 5 mm	Odd size 5 mm	Odd size 7.5 mm	
ECQE2103□B( )	0.010	7.9	4.2	7.1	12.1	5.0	5.0	0.5	2000	–	–	500
ECQE2123□B( )	0.012	7.9	4.2	7.1	12.1	5.0	5.0	0.5				
ECQE2153□B( )	0.015	7.9	4.2	7.1	12.1	5.0	5.0	0.5				
ECQE2183□B( )	0.018	7.9	4.3	7.2	12.2	5.0	5.0	0.5				
ECQE2223□B( )	0.022	7.9	4.3	7.2	12.2	5.0	5.0	0.5				
ECQE2273□B( )	0.027	7.9	4.3	7.2	12.2	5.0	5.0	0.5				
ECQE2333□B( )	0.033	7.9	4.3	7.2	12.2	5.0	5.0	0.5				
ECQE2393□B( )	0.039	7.9	4.5	7.4	12.4	5.0	5.0	0.5	1500			
ECQE2473□B( )	0.047	7.9	4.5	7.4	12.4	5.0	5.0	0.5				
ECQE2563□B( )	0.056	7.9	4.7	7.7	12.7	5.0	5.0	0.5				
ECQE2683□B( )	0.068	7.9	5.1	8.0	13.0	5.0	5.0	0.5				
ECQE2823□B( )	0.082	7.9	5.4	8.6	13.6	5.0	5.0	0.5				
ECQE2104□B( )	0.10	7.9	5.9	9.0	14.0	5.0	5.0	0.5	1000			
ECQE2124□B( )	0.12	7.9	5.7	10.6	15.6	5.0	5.0	0.5	1500			
ECQE2154□B( )	0.15	7.9	6.3	11.2	16.2	5.0	5.0	0.5	1000			
ECQE2184□B( )	0.18	10.3	5.0	9.7	14.7	7.5	5.0	0.5	1500		1500	
ECQE2224□B( )	0.22	10.3	5.4	10.1	15.1	7.5	5.0	0.5			1000	
ECQE2274□B( )	0.27	10.3	5.9	10.8	15.8	7.5	5.0	0.5	1000			
ECQE2334□B( )	0.33	10.3	6.4	11.3	16.3	7.5	5.0	0.5				
ECQE2394□B( )	0.39	12.3	5.7	10.9	15.9	10.0	5.0	0.6				
ECQE2474□B( )	0.47	12.3	6.2	11.4	16.4	10.0	5.0	0.6				
ECQE2564□B( )	0.56	12.3	6.7	11.9	16.9	10.0	5.0	0.6				
ECQE2684□B( )	0.68	12.3	7.3	12.7	17.7	10.0	5.0	0.6			900	
ECQE2824□B( )	0.82	15.3	6.3	13.3	18.3	12.5	5.0	0.6	–	600	500	
ECQE2105□B( )	1.0	15.3	7.0	14.0	19.0	12.5	5.0	0.6		500	400	
ECQE2125□B( )	1.2	15.3	7.6	14.6	19.6	12.5	5.0	0.6				
ECQE2155□B( )	1.5	15.3	8.6	15.7	20.7	12.5	5.0	0.6		400	300	
ECQE2185□B( )	1.8	20.8	7.6	14.6	19.6	17.5	10.0	0.8		–	400	
ECQE2225□B( )	2.2	20.8	8.4	15.6	20.6	17.5	10.0	0.8				
ECQE2275□B( )	2.7	20.8	9.3	16.7	21.7	17.5	10.0	0.8			300	
ECQE2335□B( )	3.3	20.8	10.5	17.9	22.9	17.5	10.0	0.8				
ECQE2395□B( )	3.9	20.8	10.8	19.8	24.8	17.5	10.0	0.8				
ECQE2475□B( )	4.7	20.8	11.9	21.0	26.0	17.5	10.0	0.8			200	

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

Style D : 0.010 μF to 0.68 μF
Style B : 0.82 μF to 4.7 μF

Rating · Dimensions · Quantity

● Rated voltage : 125 V.AC, Capacitance tolerance : ± 5 %(J), ±10 %(K)

Part No.	Cap. (μF)	Dimensions (mm)							Min. order Q'ty			
		L max.	T max.	H max.		F	S	φd	Taping			Bulk
				Straight	Crimped lead	Straight	Crimped lead		Standard 5 mm	Odd size 5 mm	Odd size 7.5 mm	
ECQE1A103□B( )	0.010	7.9	4.2	7.1		5.0		0.5				
ECQE1A123□B( )	0.012	7.9	4.2	7.1		5.0		0.5				
ECQE1A153□B( )	0.015	7.9	4.2	7.1		5.0		0.5				
ECQE1A183□B( )	0.018	7.9	4.3	7.2		5.0		0.5	2000			
ECQE1A223□B( )	0.022	7.9	4.3	7.2		5.0		0.5				
ECQE1A273□B( )	0.027	7.9	4.3	7.2	–	5.0	–	0.5			–	
ECQE1A333□B( )	0.033	7.9	4.3	7.2		5.0		0.5				
ECQE1A393□B( )	0.039	7.9	4.5	7.4		5.0		0.5				
ECQE1A473□B( )	0.047	7.9	4.8	7.7		5.0		0.5		–		
ECQE1A563□B( )	0.056	7.9	5.1	8.0		5.0		0.5				
ECQE1A683□B( )	0.068	7.9	5.4	8.6		5.0		0.5				
ECQE1A823□B( )	0.082	10.3	4.6	7.6	12.6	7.5	7.5	0.5	1500		1500	
ECQE1A104□B( )	0.10	10.3	5.1	7.7	12.7	7.5	7.5	0.5				
ECQE1A124□B( )	0.12	10.3	5.3	8.4	13.4	7.5	7.5	0.5				
ECQE1A154□B( )	0.15	10.3	5.7	8.9	13.9	7.5	7.5	0.5				
ECQE1A184□B( )	0.18	10.3	5.6	10.3	15.3	7.5	7.5	0.5			1000	
ECQE1A224□B( )	0.22	10.3	6.1	11.0	16.0	7.5	7.5	0.5	1000			500
ECQE1A274□B( )	0.27	12.3	5.4	10.7	15.7	10.0	7.5	0.6		800		
ECQE1A334□B( )	0.33	12.3	5.9	11.2	16.2	10.0	7.5	0.6		700		
ECQE1A394□B( )	0.39	12.3	6.4	11.6	16.6	10.0	7.5	0.6		600		
ECQE1A474□B( )	0.47	12.3	7.0	12.2	17.2	10.0	7.5	0.6		500	900	
ECQE1A564□B( )	0.56	12.3	6.7	11.9	16.9	10.0	7.5	0.6		600	1000	
ECQE1A684□B( )	0.68	12.3	7.3	12.7	17.7	10.0	7.5	0.6		500	900	
ECQE1A824□B( )	0.82	15.3	6.3	13.3	18.3	12.5	7.5	0.6		600	500	
ECQE1A105□B( )	1.0	15.3	7.0	14.0	19.0	12.5	7.5	0.6		500	400	
ECQE1A125□B( )	1.2	20.8	7.1	14.1	19.1	17.5	10.0	0.8	–	500	400	
ECQE1A155□B( )	1.5	20.8	8.0	15.1	20.1	17.5	10.0	0.8				
ECQE1A185□B( )	1.8	20.8	8.7	15.9	20.9	17.5	10.0	0.8		400		
ECQE1A225□B( )	2.2	20.8	9.7	17.1	22.1	17.5	10.0	0.8			300	
ECQE1A275□B( )	2.7	20.8	10.9	18.2	23.2	17.5	10.0	0.8		300		
ECQE1A335□B( )	3.3	25.8	9.6	18.7	23.7	22.5	15.0	0.8				
ECQE1A395□B( )	3.9	25.8	10.6	19.7	24.7	22.5	15.0	0.8		–	–	
ECQE1A475□B( )	4.7	25.8	11.8	20.8	25.8	22.5	15.0	0.8				

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

Style D : 0.082 μF to 0.68 μF
Style B : 0.82 μF to 4.7 μF

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 $V_{0\text{-}P}$