

Polypropylene Film Capacitor

Type: **ECQP(U)**

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

■Features

- Low loss and excellent frequency characteristics
- Excellent temperature characteristics
- High insulation resistance
- RoHS directive compliant

■Recommended Applications

- High frequency and high current circuits
- General purpose circuit

■Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11
E	C	Q	P						U	
Product code	Dielectric & construction			Rated volt.	Capacitance			Cap. Tol.	Suffix	Suffix
	200 VDC 2	400 VDC 4	630 VDC 6		±2 % G	±5 % J	±10 % K		Crimped lead B	

■Explanation of Part Number for Odd Size Taping

E	C	Q	P					R		U
Product code	Dielectric & construction			Rated volt.	Capacitance			7.5 mm Cap. Tol.	Suffix	
								Crimped lead		

■Specifications

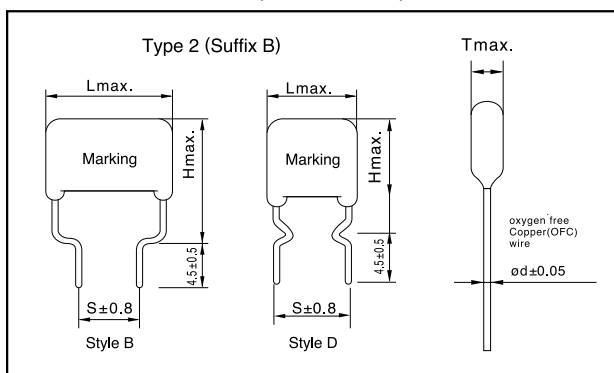
Category temp. range (Including temperature-rise on unit surface)	−40 °C to +105 °C
Rated voltage	200 VDC, 400 VDC, 630 VDC (Derating of rated voltage by 2.0 %/°C at more than 85 °C) (Derating is required according to cap. value.)(*Refer to the following table)
Capacitance range	200 V : 0.015 μF to 0.47 μF 400 V : 0.0082 μF to 0.47 μF 630 V : 0.0010 μF to 0.10 μF
Capacitance tolerance	±2 % (G), ±5 % (J), ±10 % (K)
Dissipation factor (tanδ)	tanδ ≤ 0.1 % (20 °C, 1 kHz)
Withstand voltage	Between terminals : Rated volt. (VDC) × 250 % 1 s to 5 s
Insulation resistance (IR)	C ≤ 0.33 μF : IR ≥ 45000 MΩ C > 0.33 μF : IR ≥ 15000 MΩ · μF (20 °C, 100 VDC, 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".

* Derating of rated voltage to capacitance value

Cap. value (μF)	Rated volt.			Cap. value (μF)	Rated volt.		
	200 VDC	400 VDC	630 VDC		200 VDC	400 VDC	630 VDC
0.11—0.12	195 V	390 V	615 V	0.24—0.27	175 V	350 V	—
0.13—0.15	190 V	380 V	600 V	0.30—0.33	170 V	340 V	—
0.16—0.18	185 V	370 V	585 V	0.36—0.39	165 V	320 V	—
0.20—0.22	180 V	360 V	570 V	0.43—0.47	160 V	300 V	—

■Dimensions in mm (not to scale)

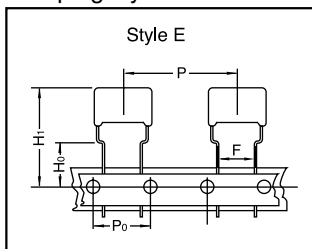


■Packaging Specifications for Bulk Package

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	
ECQP (U)	200 VDC	0.015 to 0.068						○	Ammo
	400 VDC	0.0082 to 0.15						○	Ammo
	630 VDC	0.0010 to 0.027						○	Ammo

●Lead Spacing

Style	Lead Spacing
E	7.5 mm

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

■Rating, Dimensions & Quantity/Ammo Box

●Rated voltage : 200 VDC, Capacitance tolerance : ±2 % (G), ±5 % (J), ±10 % (K)

Part No.	Cap. (μF)	Dimensions (mm)					Quantity
		L max.	T max.	H max.	S	ød	Ammo
ECQP2153□U()	0.015	14.5	6.0	16.0	10.0	0.60	500
ECQP2183□U()	0.018	14.5	6.0	16.5	10.0	0.60	
ECQP2223□U()	0.022	19.5	5.5	15.5	10.0	0.60	
ECQP2273□U()	0.027	19.5	6.0	16.0	10.0	0.60	
ECQP2333□U()	0.033	19.5	6.0	17.4	10.0	0.60	
ECQP2393□U()	0.039	19.5	6.0	17.8	10.0	0.60	
ECQP2473□U()	0.047	19.5	6.0	19.4	10.0	0.60	
ECQP2563□U()	0.056	19.5	6.5	19.8	15.0	0.60	
ECQP2683□U()	0.068	19.5	7.0	20.4	15.0	0.60	—
ECQP2823□U()	0.082	24.5	6.0	20.8	15.0	0.80	
ECQP2104□U()	0.10	24.5	6.5	21.2	15.0	0.80	
ECQP2124□U()	0.12	24.5	7.0	21.8	15.0	0.80	
ECQP2154□U()	0.15	24.5	7.5	25.0	20.0	0.80	
ECQP2184□U()	0.18	24.5	8.5	25.8	20.0	0.80	
ECQP2224□U()	0.22	24.5	9.0	26.6	20.0	0.80	
ECQP2274□U()	0.27	24.5	10.0	27.6	20.0	0.80	
ECQP2334□U()	0.33	24.5	11.0	28.6	20.0	0.80	
ECQP2394□U()	0.39	24.5	12.0	29.6	20.0	0.80	
ECQP2474□U()	0.47	24.5	13.5	31.0	20.0	0.80	

— Suffix for lead crimped or taped type.

— Cap. tol. code

Style D: 0.015 μF to 0.018 μF, 0.056 μF to 0.068 μF, 0.15 μF to 0.47 μF

Style B: 0.022 μF to 0.047 μF, 0.082 μF to 0.12 μF

※ Please consult us for straight lead wire type.

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 400 VDC, Capacitance tolerance : $\pm 2\%$ (G), $\pm 5\%$ (J), $\pm 10\%$ (K)

Part No.	Cap. (μ F)	Dimensions (mm)					Quantity
		L max.	T max.	H max.	S	ϕ d	Ammo
ECQP4822□U()	0.0082	19.5	6.0	16.0	10.0	0.60	500
ECQP4103□U()	0.010	19.5	6.5	16.5	10.0	0.60	
ECQP4123□U()	0.012	19.5	6.5	18.5	10.0	0.60	
ECQP4153□U()	0.015	19.5	6.0	18.5	10.0	0.60	
ECQP4183□U()	0.018	19.5	6.0	19.0	10.0	0.60	
ECQP4223□U()	0.022	19.5	6.0	19.4	10.0	0.60	
ECQP4273□U()	0.027	19.5	6.5	20.0	10.0	0.60	
ECQP4333□U()	0.033	19.5	7.0	21.8	15.0	0.60	400
ECQP4393□U()	0.039	19.5	7.5	22.8	15.0	0.60	
ECQP4473□U()	0.047	19.5	8.0	23.4	15.0	0.60	500
ECQP4563□U()	0.056	24.5	7.0	22.0	15.0	0.80	400
ECQP4683□U()	0.068	24.5	7.5	23.0	15.0	0.80	
ECQP4823□U()	0.082	24.5	8.5	23.8	15.0	0.80	300
ECQP4104□U()	0.10	24.5	9.0	26.6	20.0	0.80	
ECQP4124□U()	0.12	24.5	10.0	27.4	20.0	0.80	
ECQP4154□U()	0.15	24.5	11.0	28.6	20.0	0.80	—
ECQP4184□U()	0.18	29.5	10.5	26.0	20.0	0.80	
ECQP4224□U()	0.22	29.5	11.5	27.0	20.0	0.80	
ECQP4274□U()	0.27	29.5	13.0	28.4	20.0	0.80	
ECQP4334□U()	0.33	29.5	15.0	29.8	20.0	0.80	
ECQP4394□U()	0.39	35.0	15.0	30.0	20.0	0.80	
ECQP4474□U()	0.47	35.0	16.5	31.4	20.0	0.80	

Style D: 0.033 μ F to 0.047 μ F, 0.10 μ F to 0.15 μ F

Style B: 0.0082 μ F to 0.027 μ F, 0.056 μ F to 0.082 μ F, 0.18 μ F to 0.47 μ F

● Rated voltage : 630 VDC, Capacitance tolerance : $\pm 2\%$ (G), $\pm 5\%$ (J), $\pm 10\%$ (K)

Part No.	Cap. (μ F)	Dimensions (mm)					Quantity
		L max.	T max.	H max.	S	ϕ d	Ammo
ECQP6102□U()	0.0010	14.5	5.0	15.5	10.0	0.60	500
ECQP6122□U()	0.0012	14.5	5.5	15.5	10.0	0.60	
ECQP6152□U()	0.0015	14.5	5.5	15.5	10.0	0.60	
ECQP6182□U()	0.0018	14.5	5.5	15.5	10.0	0.60	
ECQP6222□U()	0.0022	14.5	5.5	15.5	10.0	0.60	
ECQP6272□U()	0.0027	14.5	5.5	16.0	10.0	0.60	
ECQP6332□U()	0.0033	14.5	6.0	16.5	10.0	0.60	
ECQP6392□U()	0.0039	14.5	6.0	18.5	10.0	0.60	
ECQP6472□U()	0.0047	14.5	6.5	18.5	10.0	0.60	
ECQP6562□U()	0.0056	14.5	7.0	19.0	10.0	0.60	
ECQP6682□U()	0.0068	19.5	5.5	18.6	10.0	0.60	
ECQP6822□U()	0.0082	19.5	6.0	19.0	10.0	0.60	
ECQP6103□U()	0.010	19.5	6.0	19.4	10.0	0.60	
ECQP6123□U()	0.012	19.5	6.5	19.8	10.0	0.60	
ECQP6153□U()	0.015	19.5	7.0	20.4	15.0	0.60	400
ECQP6183□U()	0.018	19.5	7.0	22.6	15.0	0.60	
ECQP6223□U()	0.022	19.5	8.0	23.4	15.0	0.60	
ECQP6273□U()	0.027	19.5	8.5	24.2	15.0	0.60	—
ECQP6333□U()	0.033	24.5	8.0	23.2	15.0	0.80	
ECQP6393□U()	0.039	24.5	8.5	23.8	15.0	0.80	
ECQP6473□U()	0.047	24.5	9.0	24.6	15.0	0.80	
ECQP6563□U()	0.056	24.5	10.0	27.4	20.0	0.80	
ECQP6683□U()	0.068	24.5	11.0	28.4	20.0	0.80	
ECQP6823□U()	0.082	29.5	10.5	25.6	20.0	0.80	
ECQP6104□U()	0.10	29.5	11.5	26.8	20.0	0.80	

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

Style D: 0.0010 μ F to 0.0056 μ F, 0.015 μ F to 0.027 μ F, 0.056 μ F to 0.068 μ F
 Style B: 0.0068 μ F to 0.012 μ F, 0.033 μ F to 0.047 μ F, 0.082 μ F to 0.10 μ F

* Please consult us for straight lead wire type.