Panasonic

Metallized Polypropylene Film Capacitor

Type: ECQUA [Class X2]

In accordance with UL/CSA and European safety regulation class X2

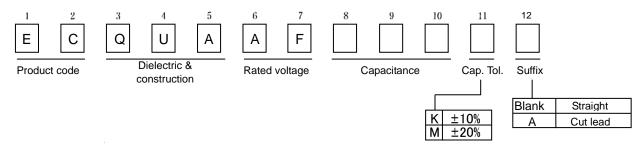
■ Features

- Compact
- Flame-retardant plastic case and non-combustible resin
- ■RoHS directive compliant

■Recommended Applications

●Interference suppressors

■Explanation of Part Numbers



■ Applicable Standard

UL	UL 60384-14	Across-The-Line Capacitors Antenna-Coupling and Line-By-Pass Components	(0.10 μF to 2.2 μF)	Accredited	
CSA	CAN/CSA E60384-14	Across-the-line capacitors Antenna-isolation and line-by-pass capacitors	$(0.10 \ \mu \text{F to } 2.2 \ \mu \text{F})$	by UL	
Europe	EN 60384-14	Class X2	$(0.10 \ \mu \text{F to } 2.2 \ \mu \text{F})$	Accredited	
International	IEC 60384-14	Class X2	(0.10 μF to 2.2 μF)	by VDE	

^{*} When applying this capacitor to European and American safety standards, please use type designation and rating such as ECQUA, 0.1 μ F.

■Specifications

Category temp. range	-40 °C to +110 °C				
Rated voltage	275 VAC (Safety standard approval)				
Capacitance range	0.10 to 2.2 μ F				
Capacitance tolerance	±10 % (K), ±20 % (M)				
Discipation factor (to a S.)	$C \le 1.0 \mu\text{F:} \tan \delta \le 0.1 \% (20 ^{\circ}\text{C}, 1 \text{kHz})$				
Dissipation factor (tan δ)	$C > 1.0 \muF$: tan $\delta \leq 0.2 \%$ (20 °C, 1 kHz)				
Withstand voltage	Between terminals: 633 VAC, 1183VDC 60s				
withstand voltage	Between terminals to enclosure: 2050 VAC 60 s				
	$C \le 0.33 \mu\text{F} : IR \ge 15000 \text{M}\Omega$ (20 °C, 100 VDC, 60 s)				
Insulation resistance (IR)	$C > 0.33 \muF : IR \ge 5000 M\Omega \cdot \muF$ (20 °C, 100 VDC, 60 s)				
	C≤0.47 μ F:IR≥2000 MΩ (20 °C, 500 VDC, 60 s)				
Maximum AC voltage *	310 VAC				

^{*}Use of this capacitor is limited to AC voltage (50Hz or 60Hz sine wave).

310VAC is not nominal continuous applied voltage, but only indicates maximum value including fluctuation in the voltage of the power supply. Basic nominal voltage is considered as 240V AC.

This maximum AC voltage is specified in only ECQUA type, not specified in other types.

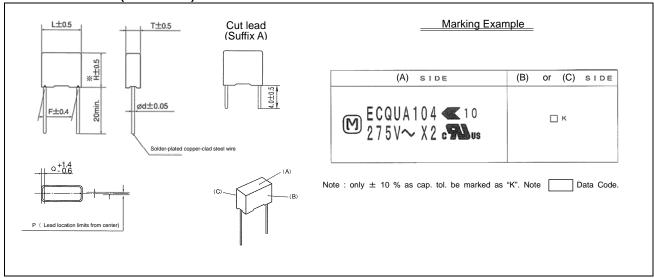
Please refer to individual product specification, and contact us for further questions regarding design life.



^{*}Approval number (File No.) of safety regulations are subject to revision without notice. Ask factory for a copy of the latest file No

^{*}Maximum AC voltage including line voltage fluctuation is 310V AC.

■Dimensions in mm (not to scale)



■ Rating & Dimensions

●Capacitance tolerance: ±10 % (K), ±20 % (M)

Capacitance tolerance. ±10 % (N), ±20 % (M)											
Part No.	Capacitance	Dimension (mm)					Min. order Q'ty				
Part No.	(μF)	L	Т	Н	F	φd	Р	Q	Straight	Cut lead	
ECQUAAF104□()	0.10	17.5	5.0	12.0	15.0	0.60	0±0.8	1.3			
ECQUAAF154□()	0.15	17.5	6.0	13.0	15.0	0.60	0±0.8	1.3	1000	1000	
ECQUAAF224□()	0.22	17.5	7.5	14.0	15.0	0.60	0±0.8	1.3			
ECQUAAF334□()	0.33	17.5	9.0	16.0	15.0	0.60	0±0.8	1.3		800	
ECQUAAF474□()	0.47	26.0	8.5	15.0	22.5	0.80	0±0.8	1.8	600) 800	
ECQUAAF684□()	0.68	26.0	10.0	17.0	22.5	0.80	0±0.8	1.8	500	500	
ECQUAAF105□()	1.0	26.0	12.0	19.0	22.5	0.80	0±0.8	1.8	300	300	
ECQUAAF155□()	1.5	31.0	12.0	22.0	27.5	0.80	0±0.8	1.8	200	200	
ECQUAAF225□()	2.2	31.0	14.5	24.5	27.5	0.80	0±0.8	1.8			

Cap. tol. code

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ECQUA Type AC275V series (Metallized Polypropylene Film)

Electrical Characteristics < Typical Data >

