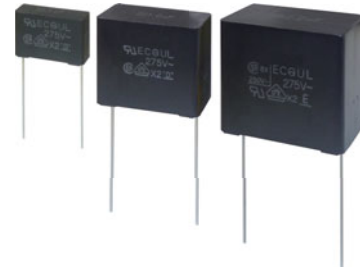


Metalized Polyester Film Capacitor

Type : **ECQUL** [Class X2]
[Class Y2/X2]



In accordance with UL/CSA and European safety regulation class X2 or class Y2/X2

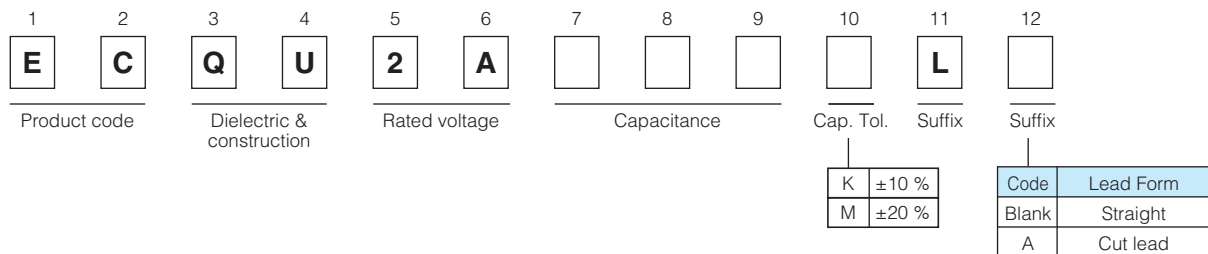
Features

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

Recommended applications

- Interference suppressors

Explanation of part number



Applicable standard

* It is certified as type ECQUL in the following approval.

Approval		Class	Capacitance range	Certification organization
UL	UL60384-14	Class Y2/X2	(0.0010 μF to 0.0068 μF)	UL
		Class X2	(0.0082 μF to 2.2 μF)	
CSA	CAN/CSA E60384-14	Class Y2/X2	(0.0010 μF to 0.0068 μF)	CSA
		Class X2	(0.0082 μF to 2.2 μF)	
	CSA C22.2 No.8-M1986	Electromagnetic Interference (EMI) Filters	(1.2 μF to 2.2 μF)	
Europe	EN60384-14	Class Y2/X2	(0.0010 μF to 0.0068 μF)	VDE
		Class X2	(0.0082 μF to 2.2 μF)	
International	IEC60384-14	Class Y2/X2	(0.0010 μF to 0.0068 μF)	VDE
		Class X2	(0.0082 μF to 2.2 μF)	

* When applying this capacitor to European and American safety standards, please use type designation and rating such as ECQUL, 0.1 μF.

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

* This capacitor is recognized for European standards by VDE only. But, there are no problems using this capacitor in a device which will get approvals from certification bodies in Europe, SEMKO, DEMKO, NEMKO, FIMKO and SEV etc.

Specifications

Category temperature range	-40 °C to +100 °C (85 °C max. on CSA C22.2 No.8 spec.)
Rated voltage	275 V.AC (250 V.AC on CSA C22.2 No.8 spec.)
Rated capacitance	0.0010 μF to 2.2 μF
Capacitance tolerance	±10 % (K), ±20 % (M)
Dissipation factor (tan δ)	tan δ ≤ 1.0 % (20 °C, 1 kHz)
Withstand voltage	Between terminals : 575 V.AC, 1768 V.DC, 60 s (0.0082 μF to 2.2 μF) Between terminals : 1500 V.AC, 2121 V.DC, 60 s (0.0010 μF to 0.0068 μF) Between terminals to enclosure : 2050 V.AC, 60 s
Insulation resistance (IR)	C ≤ 0.33 μF : IR ≥ 15000 MΩ (20 °C, 100 V.DC, 60 s) C > 0.33 μF : IR ≥ 5000 MΩ · μF (20 °C, 100 V.DC, 60 s) IR ≥ 2000 MΩ (20 °C, 500 V.DC, 60 s)

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

Dimensions

Marking example

STYLE	(A) side	(B) side
1 0.0010 μ F to 0.0068 μ F	M .001 μ F K	ECQUL 275V~ X2 \square
2 0.0082 μ F to 1.0 μ F	M .0082 μ F K	ECQUL 275V~ X2 \square
3 1.2 μ F to 2.2 μ F	M 1.5 μ F K	ECQUL 275V~ X2 \square

Note : Only $\pm 10\%$ as cap. tol. be marked as "K".
Note : \square Date code.

Unit : mm

* $\geq 1.2 \mu\text{F} \pm 1.0$

Rating · Dimensions · Quantity

- Capacitance tolerance : $\pm 10\%$ (K), $\pm 20\%$ (M)

Part No.	Capacitance (μ F)	Dimensions (mm)							Min. order Q'ty
		L	T	H	F	ϕd	P	Q	
ECQU2A102 \square L ()	0.0010	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	500
ECQU2A122 \square L ()	0.0012	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A152 \square L ()	0.0015	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A182 \square L ()	0.0018	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A222 \square L ()	0.0022	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A272 \square L ()	0.0027	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A332 \square L ()	0.0033	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A392 \square L ()	0.0039	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A472 \square L ()	0.0047	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A562 \square L ()	0.0056	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A682 \square L ()	0.0068	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A822 \square L ()	0.0082	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A103 \square L ()	0.010	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A123 \square L ()	0.012	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A153 \square L ()	0.015	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A183 \square L ()	0.018	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A223 \square L ()	0.022	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A273 \square L ()	0.027	15.0	5.0	11.5	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A333 \square L ()	0.033	15.0	6.0	13.0	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A393 \square L ()	0.039	15.0	6.0	13.0	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A473 \square L ()	0.047	15.0	6.0	13.0	12.5	0.6	0 \pm 0.50	1.3	
ECQU2A563 \square L ()	0.056	17.5	4.5	11.5	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A683 \square L ()	0.068	17.5	4.5	11.5	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A823 \square L ()	0.082	17.5	5.5	12.0	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A104 \square L ()	0.10	17.5	5.5	12.0	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A124 \square L ()	0.12	17.5	6.5	14.5	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A154 \square L ()	0.15	17.5	6.5	14.5	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A184 \square L ()	0.18	17.5	8.0	16.0	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A224 \square L ()	0.22	17.5	8.0	16.0	15.0	0.6	0 \pm 0.50	1.3	
ECQU2A274 \square L ()	0.27	17.5	9.5	17.5	15.0	0.8	0 \pm 0.50	1.3	
ECQU2A334 \square L ()	0.33	17.5	9.5	17.5	15.0	0.8	0 \pm 0.50	1.3	
ECQU2A394 \square L ()	0.39	25.5	8.5	17.5	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A474 \square L ()	0.47	25.5	8.5	17.5	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A564 \square L ()	0.56	25.5	10.5	19.5	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A684 \square L ()	0.68	25.5	10.5	19.5	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A824 \square L ()	0.82	25.5	12.0	22.0	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A105 \square L ()	1.0	25.5	12.0	22.0	22.5	0.8	0 \pm 0.75	1.5	
ECQU2A125 \square L ()	1.2	30.5	16.5	26.0	27.5	0.8	0 \pm 0.75	1.5	
ECQU2A155 \square L ()	1.5	30.5	16.5	26.0	27.5	0.8	0 \pm 0.75	1.5	
ECQU2A185 \square L ()	1.8	30.5	19.0	29.5	27.5	0.8	0 \pm 0.75	1.5	
ECQU2A225 \square L ()	2.2	30.5	19.0	29.5	27.5	0.8	0 \pm 0.75	1.5	

* \square : Capacitance tolerance code
() : Suffix for lead form