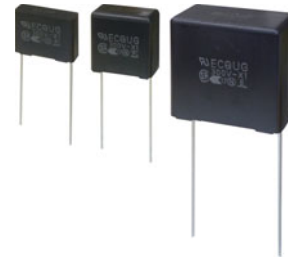


Metalized Polypropylene Film Capacitor

Type : **ECQUG [Class X1]**

In accordance with UL/CSA and European safety regulation class X1



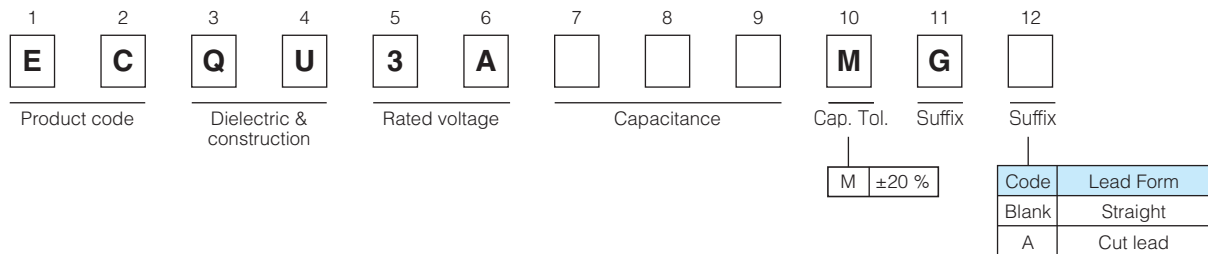
Features

- Equipped with a safety mechanism
- 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 ECQUG in the following approval.

Approval		Class	Certification organization
UL	UL60384-14	Class X1	UL
CSA	CAN/CSA E60384-14	Class X1	CSA
Europe	EN60384-14	Class X1	NEMKO
International	IEC60384-14	Class X1	

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

* European standards marking are NEMKO only. But, there are no problem using this capacitor in a device which will get approvals from certification bodies in Europe, VDE, FIMKO, SEMKO, DEMKO, and SEV etc. except VDE and FIMKO.

Specifications

Category temperature range	-40 °C to +100 °C
Rated voltage	300 V.AC
Rated capacitance	0.010 μF to 1.0 μF (E6)
Capacitance tolerance	±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 Between terminals to enclosure : 2100 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

Technical drawings showing dimensions: $L \pm 0.5$, $T \pm 0.5$, $H \pm 0.5$, $F \pm 0.4$, 20 min. , $\phi d \pm 0.05$, 4.0 ± 0.5 , $Q \begin{smallmatrix} +1.4 \\ -0.6 \end{smallmatrix}$, and P (Lead location limits from center). Labels include "Cut lead (Suffix A)", "Copper-clad steel wire", and "Unit : mm".

Marking example table:

(A) side	(B) side
$\text{M} .01 \mu\text{F}$	 ECQUG 300V~X1

Note : Date code.

Rating · Dimensions · Quantity

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

Part No.	Capacitance (μF)	Dimensions (mm)							Min. order Q'ty
		L	T	H	F	ϕd	P	Q	
ECQU3A103MG()	0.010	15.0	5.0	11.5	12.5	0.6	0 ± 0.50	1.3	500
ECQU3A153MG()	0.015	15.0	5.0	11.5	12.5	0.6	0 ± 0.50	1.3	
ECQU3A223MG()	0.022	15.0	5.0	11.5	12.5	0.6	0 ± 0.50	1.3	
ECQU3A333MG()	0.033	15.0	6.0	13.0	12.5	0.6	0 ± 0.50	1.3	
ECQU3A473MG()	0.047	15.0	6.0	13.0	12.5	0.6	0 ± 0.50	1.3	
ECQU3A683MG()	0.068	15.0	8.0	15.0	12.5	0.6	0 ± 0.50	1.3	
ECQU3A104MG()	0.10	15.0	8.0	15.0	12.5	0.6	0 ± 0.50	1.3	
ECQU3A154MG()	0.15	18.0	8.0	16.5	15.0	0.8	0 ± 0.50	1.3	
ECQU3A224MG()	0.22	18.0	9.0	17.5	15.0	0.8	0 ± 0.50	1.3	
ECQU3A334MG()	0.33	26.0	9.0	18.5	22.5	0.8	0 ± 0.50	1.5	
ECQU3A474MG()	0.47	26.0	10.5	20.0	22.5	0.8	0 ± 0.75	1.5	
ECQU3A684MG()	0.68	26.0	12.5	22.0	22.5	0.8	0 ± 0.75	1.5	
ECQU3A105MG()	1.0	27.0	16.5	25.5	22.5	0.8	0 ± 0.75	2.2	

* () : Suffix for lead form