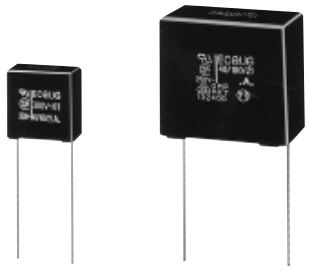
Metallized Polyester Film Capacitor

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 Numbers

1	2	3	4	5	6	7	8	9	10	11
E	C	Q	U	3	A				M	G
Product code		Dielectric & construction		Rated vol.		Capacitance			Cap. Tol.	Suffix

M	±20 %

■ Applicable Standard

UL	UL 1414	Across-The-Line Capacitors Antenna-Coupling and Line-By-Pass Components
CSA	CSA C22.2 No.1	Across-the-line capacitors Antenna-Isolation and line-by-pass capacitors

SEMKO	IEC 60384-14 EN 132400	Class X1
DEMKO		
NEMKO		
FIMKO		
VDE		
SEV		

❊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..

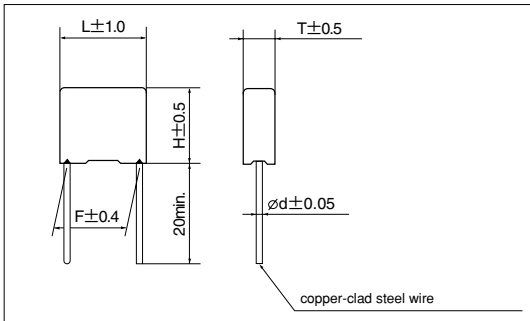
❊European standards marking are VDE and FIMKO only. But, there are no problem using this capacitor in a device which will get approvals from certification bodies in Europe, SEMKO, DEMKO, NEMKO and SEV etc. except VDE and FIMKO.

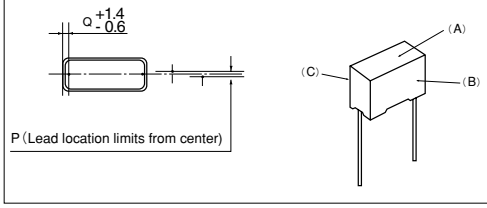
■ Specifications

Category temp. range	-40 ˚C to +100 ˚C (85 ˚C max. on UL/CSA spec.)
Rated voltage	300 VAC (IEC60384-14), 250 VAC (UL, CSA)
Capacitance range	0.010 µF to 1.0 µF (E6)
Capacitance tolerance	±20 % (M)
Dissipation factor (tanδ)	tanδ≦1.0 % (20 ˚C, 1 kHz)
Withstand voltage	Between terminals : 575 VAC, 1768 VDC, 60 s Between terminals to enclosure : 2100 VAC, 60 s
Insulation resistance (IR)	C≦0.33 µF : IR≧15000 MΩ (20 ˚C, 100 VDC, 60 s) C>0.33 µF : IR≧5000 MΩ · µF (20 ˚C, 100 VDC, 60 s) IR≧2000 MΩ (20 ˚C, 500 VDC, 60 s)

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

■Dimensions in mm (not to scale)





Marking Example

STYLE	(a) side	(b) side	(c) side
1 (0.010 µF to 0.22 µF)	Ⓜ.01 µF	ECQUG 300 V～X1 40/100/21 250 V～ Date Code	GMF MKT 132400
2 (0.33 µF to 1.0 µF)	Ⓜ 1.0 µF 300 V～	ECQUG 40/100/21 GMF MKT 132400 250 V～ X1 Date Code	

■Rating & Dimensions

● Capacitance tolerance : ±20 %(M)

Part No.	Cap. (µF)	Dimensions (mm)						
		L	T	H	F	ød	P	Q
ECQU3A103MG	0.010	15.0	5.0	11.5	12.5	0.60	0±0.5	1.3
ECQU3A153MG	0.015	15.0	5.0	11.5	12.5	0.60	0±0.5	1.3
ECQU3A223MG	0.022	15.0	5.0	11.5	12.5	0.60	0±0.5	1.3
ECQU3A333MG	0.033	15.0	6.0	13.0	12.5	0.60	0±0.5	1.3
ECQU3A473MG	0.047	15.0	6.0	13.0	12.5	0.60	0±0.5	1.3
ECQU3A683MG	0.068	15.0	8.0	15.0	12.5	0.60	0±0.5	1.3
ECQU3A104MG	0.10	15.0	8.0	15.0	12.5	0.60	0±0.5	1.3
ECQU3A154MG	0.15	18.0	8.0	16.5	15.0	0.80	0±0.5	1.3
ECQU3A224MG	0.22	18.0	9.0	17.5	15.0	0.80	0±0.5	1.3
ECQU3A334MG	0.33	26.0	9.0	18.5	22.5	0.80	0±0.5	1.5
ECQU3A474MG	0.47	26.0	10.5	20.0	22.5	0.80	0±0.75	1.5
ECQU3A684MG	0.68	26.0	12.5	22.0	22.5	0.80	0±0.75	1.5
ECQU3A105MG	1.0	27.0	16.5	25.5	22.5	0.80	0±0.75	2.2

Cap.tol.code