

# Metallized Polyester Film Capacitor

Type: **ECQUG[Class X1]**

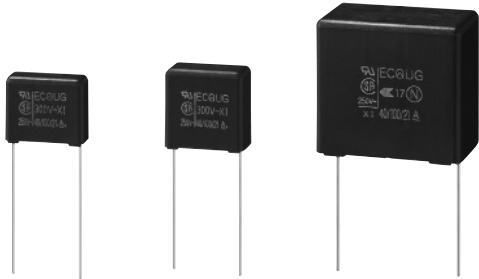
In accordance with UL/CSA and European safety regulation class X1

## 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       | 12       |
|--------------|---------------------------|----------|------------|----------|-------------|---|---|-----------|----------|----------|----------|
| <b>E</b>     | <b>C</b>                  | <b>Q</b> | <b>U</b>   | <b>3</b> | <b>A</b>    |   |   |           | <b>M</b> | <b>G</b> |          |
| Product code | Dielectric & construction |          | Rated vol. |          | Capacitance |   |   | Cap. Tol. | Suffix   | Suffix   |          |
|              |                           |          |            |          |             |   |   | M ±20 %   |          | Blank    | Straight |
|              |                           |          |            |          |             |   |   |           |          | A        | Cut lead |

## Applicable Standard

|       |                   |                                                                            |
|-------|-------------------|----------------------------------------------------------------------------|
| UL    | UL 1414           | Across-The-Line Capacitors<br>Antenna-Coupling and Line-By-Pass Components |
| CSA   | CAN/CSA E60384-14 | Class X1                                                                   |
| ENEC  | IEC 60384-14      | Class X1                                                                   |
| NEMKO | EN 60384-14       |                                                                            |

\*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..

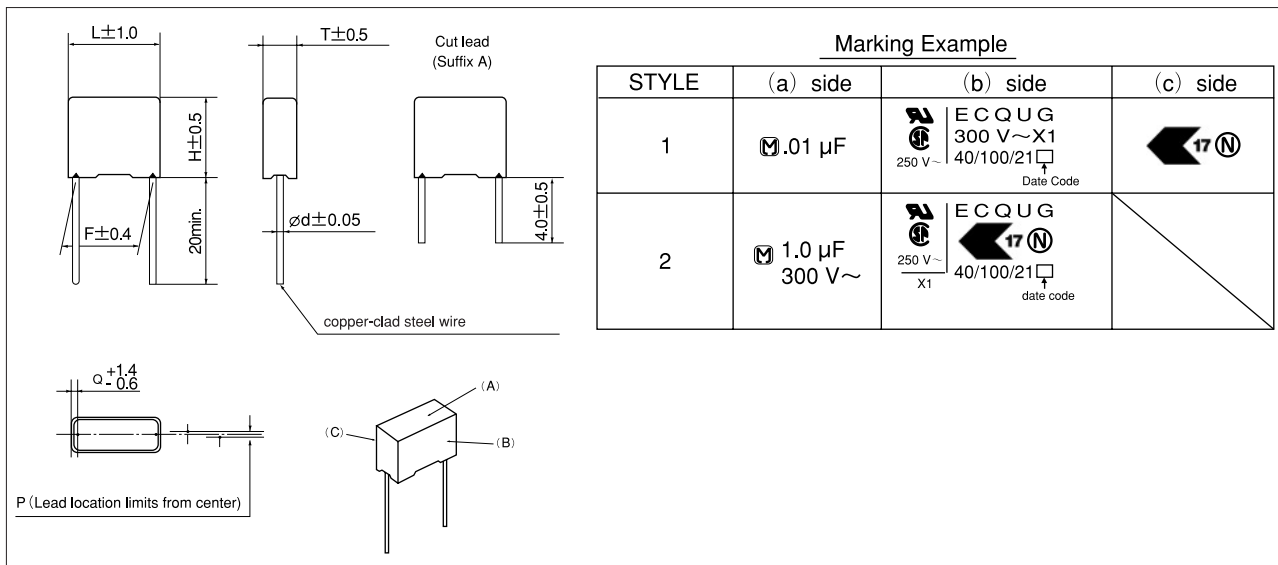
\*European standards marking are ENEC and NEMKO only. But, there are no problem using this capacitor in a device which will get approvals from certification bodies in Europe, VDE, FIMKO, SEMKO, DEMKO, and SEV etc. except VDE and FIMKO.

## Specifications

|                            |                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Category temp. range       | -40 °C to +100 °C (85 °C max. on UL spec.)                                                                                                |
| Rated voltage              | 300 VAC (IEC60384-14, CAN/CSA E60384-14), 250 VAC (UL)                                                                                    |
| 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<br>Between terminals to enclosure : 2100 VAC, 60 s                                            |
| Insulation resistance (IR) | C≤0.33 μF : IR≥15000 MΩ (20 °C, 100 VDC, 60 s)<br>C>0.33 μF : IR≥5000 MΩ · μF (20 °C, 100 VDC, 60 s)<br>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)



### ■Rating & Dimensions

#### ● Capacitance tolerance : ±20 %(M)

| Part No.       | Cap.<br>(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 | 0.60 | 0±0.5  | 1.3 | 500             |
| 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 |                 |

↑ Suffix for lead form  
 ↑ Cap. tol. code

Interference Suppressor