

## Metallized Polypropylene Film Capacitor (For Automotive)

#### **ECWFG** series



Non-inductive construction using metallized Polypropylene film with flame retardant plastic case.

#### **Features**

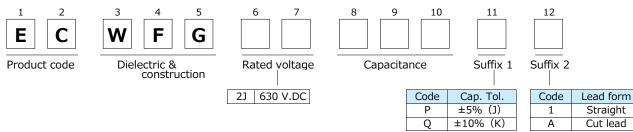
- High safety (with safety function)
- High moisture resistance (85℃, 85%, 500 V.DC, 1000 h)
- High thermal shock resistance (-55°C  $\Leftrightarrow$  85°C, 1000 cycles)
- High temperature load test (125℃, 450 V.DC, 1000 h)
- Flame-retardant plastic case and non-combustible resin
- AEC-Q200 compliant
- RoHS compliant

#### **Recommended applications**

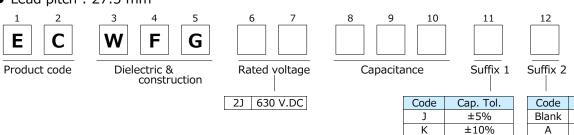
- DC/DC, AC/DC converter circuit in xEV
- High frequency and high current circuits

#### **Explanation of part number**

• Lead pitch: 22.5 mm



• Lead pitch: 27.5 mm



Specifications							
Category temp. range	-40 °C to +110 °C						
(Including temperature-rise on unit surface)							
Rated voltage	630 V.DC ( Derating of rated voltage by 1.0 % / $^{\circ}$ C at more than 85 $^{\circ}$ C)						
Capacitance range	Lead pitch : 22.5 mm	1.0 μF, 1.5 μF, 2.2 μF, 3.0 μF					
	Lead pitch : 27.5 mm	1.0 μF, 1.5 μF, 2.2 μF, 3.0 μF, 4.7 μF					
Capacitance tolerance	±5% (J), ±10 % (K)						
Dissipation factor (tan $\delta$ )	tan δ ≤ 0.1 % (20 °C, 1 kHz)						
Withstand voltage	Between terminals: Rated voltage (V.DC) × 150 % 60 s						
Insulation resistance (IR)	IR ≥ 3,000 MΩ·uF (20 °C, 500 V.DC, 60 s)						

<sup>\*</sup> In case of applying voltage in alternating current (50 Hz or 60 Hz sine wave) to a capacitor with DC rated voltage, please refer to the page of "Permissible voltage (R.M.S) in alternating current corresponding to DC rated voltage".

Lead form

Straight

Cut lead



#### **Dimensions** L±0.5 T±0.5 Cut lead Marking (Suffix A) example WFG105J Marking 2J 🔽 4.0±0.5 F±0.4 Date code Φd±0.05 Copper wire P(Lead location limits from cente Unit:mm

#### **Rating · Dimensions**

• Lead pitch: 22.5 mm

Part No	Cap.		Dimensions (mm)							Min. order q'ty	
Pail NO	(µF)	L	Т	Н	F	Φd	Р	Q	Straight	Cut lead	
ECWFG2J105P()	1.0	27.0	10.5	19.0	22.5	1.0	0±0.8	2.25	400	350	
ECWFG2J105Q()											
ECWFG2J155P()	1.5	27.0	12.0	21.0	22.5	1.0	0±0.8	2.25	300	300	
ECWFG2J155Q()											
ECWFG2J225P()	2.2	27.0	15.5	24.0	22.5	1.0	0±0.8	2.25	200	250	
ECWFG2J225Q()											
ECWFG2J305P()	3.0	27.0	17.5	26.5	22.5	1.0	0±0.8	2.25	150	150	
ECWFG2J305Q()		27.0	17.5								

\*(): Suffix for lead crimped

• Lead pitch: 27.5 mm

Part No	Cap.	Dimensions (mm)						Min. order q'ty		
	(µF)	L	Т	Н	F	Фd	Р	Q	Straight	Cut lead
ECWFG2J105□()	1.0	31.5	9.5	18.0	27.5	1.0	0±0.8	2.0	400	350
ECWFG2J155□()	1.5	31.5	10.5	21.0	27.5	1.0	0±0.8	2.0	300	300
ECWFG2J225□()	2.2	31.5	12.0	24.5	27.5	1.0	0±0.8	2.0	200	250
ECWFG2J305□()	3.0	31.5	13.5	28.5	27.5	1.0	0±0.8	2.0	150	150
ECWFG2J475□()	4.7	31.5	17.5	32.5	27.5	1.0	0±0.8	2.0	100	100

 $\ast\,\square$  : Capacitance tolerance code

\*(): Suffix for lead crimped



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