

# Metallized Polypropylene Film Capacitor (For Automotive) Type ECWFG





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

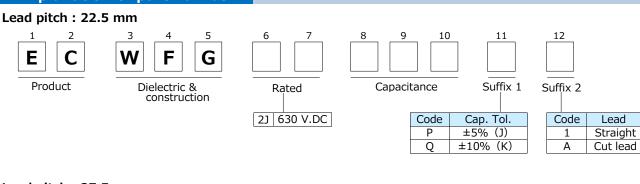
#### **Features**

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

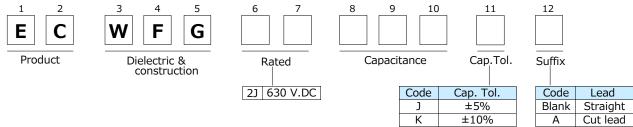
### **Recommended applications**

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

## Explanation of part number



#### Lead pitch: 27.5 mm



#### **Specifications**

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



#### **Dimensions** L±0.5 T±0.5 Cut lead Marking (Suffix A) example Marking WFG105J 4.0±0.5 20 min. Date code F±0.4 Φd±0.05 Copper Wire P(Lead location limits from center) Unit: mm

## Rating · Dimensions · Quantity

Lead pitch: 22.5 mm

p.tean :											
Part No	Capacitanc		Dimensions (mm)							Min. Order Q't	
	е	L	Т	Н	F	Фd	Р	Q	Straight	Cut lead	
ECWFG2J105P()	1.0	27.0	10.5	19.0	22.5	1.0	8.0±0	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()											

<sup>\*()</sup>: Suffix for lead crimped

Lead pitch: 27.5 mm

Part No	Capacitanc		Dimensions (mm)							Min. Order Q't	
rail INO	е	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