

## Metallized Polypropylene Film Capacitor (For Automotive)

ECWFG series

**UPGRADE**



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

### Features

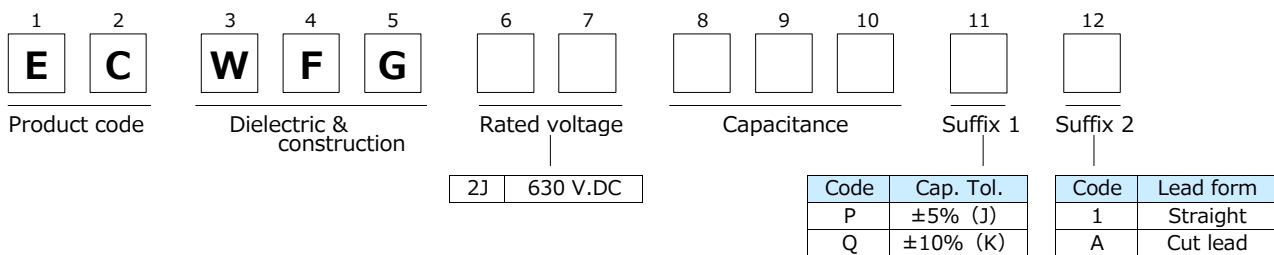
- High safety (with safety function)
- High moisture resistance (85°C, 85%)
  - 630 V.DC : 500 V.DC, 1000 h
  - 1100 V.DC : 700 V.DC, 500 h (C < 2.0 μF) / 770 V.DC, 500 h (C ≥ 2.0 μF)
- High thermal shock resistance (630, 1100 V.DC : -55°C ⇔ 85°C, 1000 cycles)
- High temperature load test (125°C)
  - 630 V.DC : 450 V.DC, 1000 h
  - 1100 V.DC : 660 V.DC, 1000 h
- Flame-retardant plastic case and non-combustible resin
- AEC-Q200 compliant
- RoHS compliant

### Recommended applications

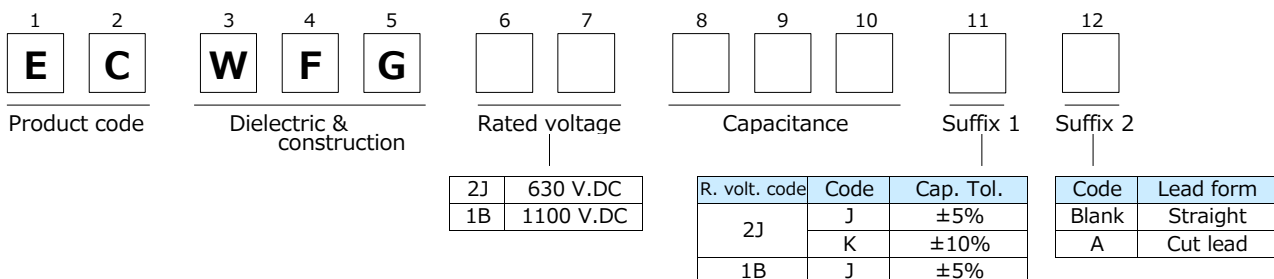
- DC/DC, AC/DC converter circuit in xEV
- High frequency and high current circuits

### Explanation of part number

- Lead pitch : 22.5 mm



- Lead pitch : 27.5 mm

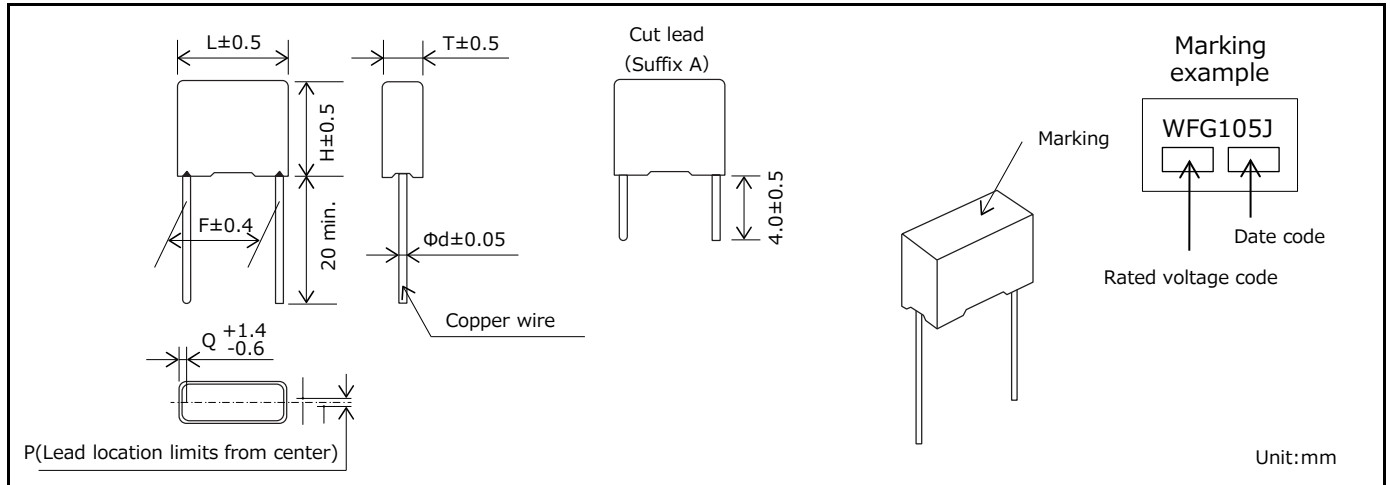


### Specifications

Category temp. range (Including temperature-rise on unit surface)	-40 °C to +110 °C		
Rated voltage	630 V.DC, 1100 V.DC ( Derating of rated voltage by 1.0 % / °C at more than 85 °C)		
Capacitance range	630 V.DC	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
	1100 V.DC	Lead pitch : 27.5 mm	1.0 μF to 5.0 μF
Capacitance tolerance	±5% (J), ±10% (K)		
Dissipation factor (tan δ)	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)		

\* 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



## Rating · Dimensions · Quantity

- Rated voltage : 630 V.DC, Capacitance tolerance :  $\pm 5\%$ (J),  $\pm 10\%$ (K)  
[ Lead pitch : 22.5 mm ]

Part No	Cap. ( $\mu$ F)	Dimensions (mm)							Min. order Q'ty	
		L	T	H	F	$\Phi$ d	P	Q	Straight	Cut lead
ECWFG2J105P( )	1.0	27.0	10.5	19.0	22.5	1.0	0 $\pm$ 0.8	2.25	400	350
ECWFG2J105Q( )										
ECWFG2J155P( )	1.5	27.0	12.0	21.0	22.5	1.0	0 $\pm$ 0.8	2.25	300	300
ECWFG2J155Q( )										
ECWFG2J225P( )	2.2	27.0	15.5	24.0	22.5	1.0	0 $\pm$ 0.8	2.25	200	250
ECWFG2J225Q( )										
ECWFG2J305P( )	3.0	27.0	17.5	26.5	22.5	1.0	0 $\pm$ 0.8	2.25	150	150
ECWFG2J305Q( )										

\* ( ) : Suffix for lead crimped

[ Lead pitch : 27.5 mm ]

Part No	Cap. ( $\mu$ F)	Dimensions (mm)							Min. order Q'ty	
		L	T	H	F	$\Phi$ d	P	Q	Straight	Cut lead
ECWFG2J105□( )	1.0	31.5	9.5	18.0	27.5	1.0	0 $\pm$ 0.8	2.0	400	350
ECWFG2J155□( )	1.5	31.5	10.5	21.0	27.5	1.0	0 $\pm$ 0.8	2.0	300	300
ECWFG2J225□( )	2.2	31.5	12.0	24.5	27.5	1.0	0 $\pm$ 0.8	2.0	200	250
ECWFG2J305□( )	3.0	31.5	13.5	28.5	27.5	1.0	0 $\pm$ 0.8	2.0	150	150
ECWFG2J475□( )	4.7	31.5	17.5	32.5	27.5	1.0	0 $\pm$ 0.8	2.0	100	100

\* □ : Capacitance tolerance code

\* ( ) : Suffix for lead crimped

- Rated voltage : 1100 V.DC, Capacitance tolerance :  $\pm 5\%$ (J)

NEW Part No	Cap. ( $\mu$ F)	Dimensions (mm)							Min. order Q'ty	
		L	T	H	F	$\Phi$ d	P	Q	Straight	Cut lead
ECWFG1B105J( )	1.0	31.5	10.5	21.0	27.5	0.8	0 $\pm$ 1.0	2.0	300	300
ECWFG1B155J( )	1.5	31.5	12.0	24.5	27.5	0.8	0 $\pm$ 1.0	2.0	200	250
ECWFG1B205J( )	2.0	31.5	12.0	24.5	27.5	0.8	0 $\pm$ 1.0	2.0		
ECWFG1B225J( )	2.2	31.5	13.5	28.5	27.5	0.8	0 $\pm$ 1.0	2.0	150	150
ECWFG1B305J( )	3.0	31.5	16.0	29.5	27.5	0.8	0 $\pm$ 1.0	2.0		
ECWFG1B335J( )	3.3	31.5	16.0	29.5	27.5	0.8	0 $\pm$ 1.0	2.0	100	100
ECWFG1B405J( )	4.0	31.5	17.5	32.5	27.5	0.8	0 $\pm$ 1.0	2.0		
ECWFG1B475J( )	4.7	31.5	18.5	35.0	27.5	0.8	0 $\pm$ 1.0	2.0		
ECWFG1B505J( )	5.0	31.5	18.5	35.0	27.5	0.8	0 $\pm$ 1.0	2.0	100	100

\* ( ) : Suffix for lead crimped

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