

UPGRADE

Metallized Polypropylene Film Capacitor (For Automotive)

ECWFG series

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



Features

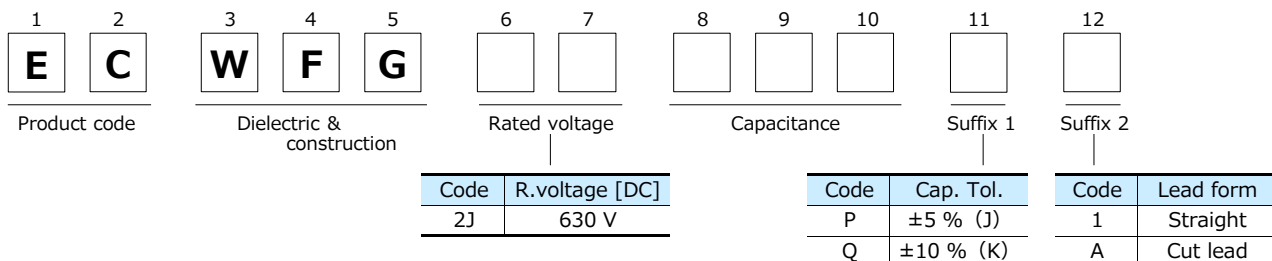
- High safety (with safety function)
- High moisture resistance (85°C, 85%)
 - 630 V : 500 V, 1000 h
 - 700 V : 500 V, 1000 h
 - 800 V : 560 V, 500 h
 - 1100 V : 700 V, 500 h (C < 2.0 μF) / 770 V, 500 h (C ≥ 2.0 μF)
- High thermal shock resistance (630 to 1100 V : -55°C ⇔ 85°C, 1000 cycles)
- High temperature load test (125°C)
 - 630 V : 450 V, 1000 h
 - 700 V : 450 V, 1000 h
 - 800 V : 480 V, 1000 h
 - 1100 V : 660 V, 1000 h
- Flame-retardant plastic case and non-combustible resin
- AEC-Q200 compliant
- RoHS compliant

Recommended applications

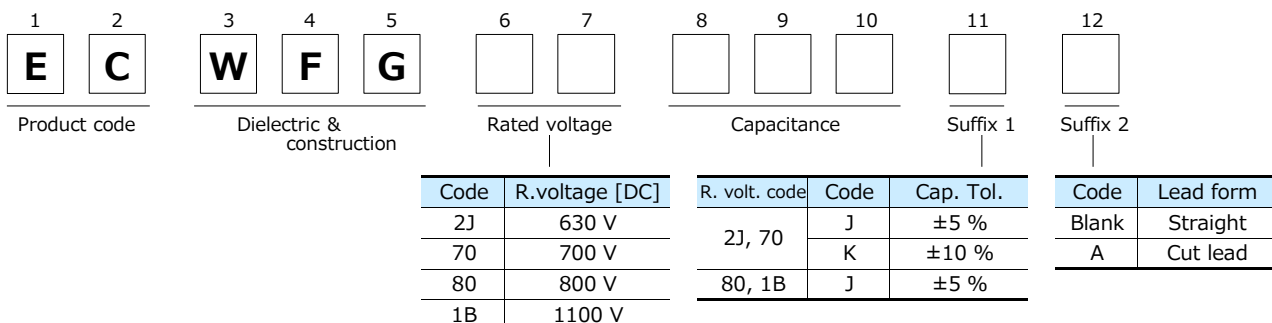
- DC/DC, AC/DC converter circuit in xEV
- High frequency and high current circuits

Explanation of part number

■ Lead pitch : 22.5 mm



■ Lead pitch : 27.5 mm

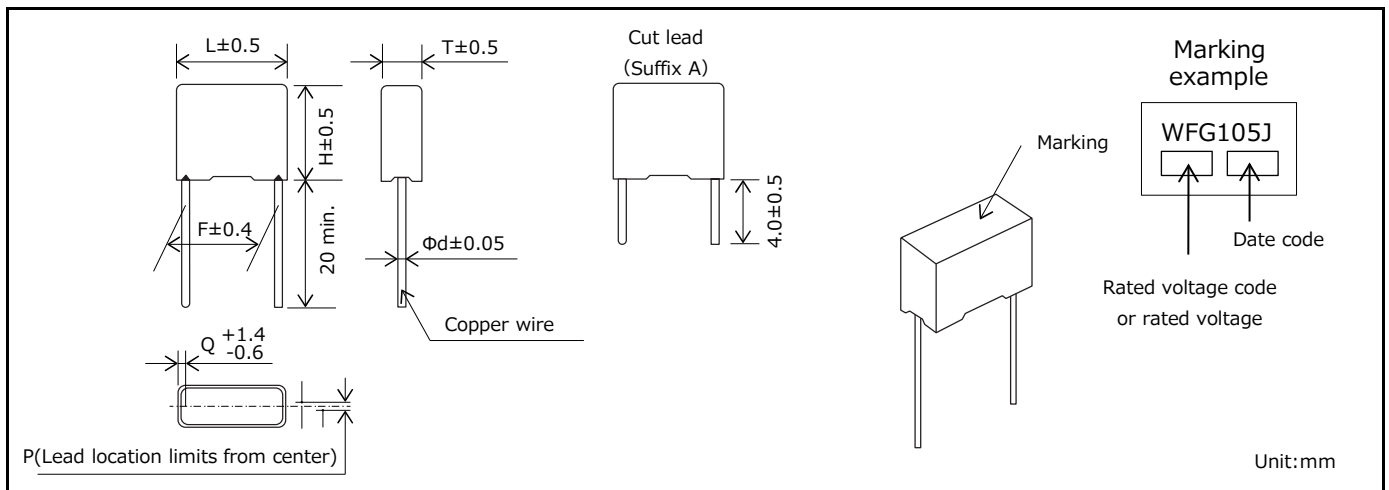


Specifications

Category temp. range (Including temperature-rise on unit surface)	-40 °C to +110 °C		
Rated voltage [DC]	630 V to 1100 V (Derating of rated voltage by 1.0 % / °C at more than 85 °C)		
Capacitance range	630 V	Lead pitch : 22.5 mm	1.0 μF to 3.0 μF
		Lead pitch : 27.5 mm	1.0 μF to 4.7 μF
	700 V	Lead pitch : 27.5 mm	1.0 μF to 4.7 μF
	800 V	Lead pitch : 27.5 mm	2.0 μF to 8.0 μF
	1100 V	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) × 150 % 60 s		
Insulation resistance (IR)	IR ≥ 3,000 MΩ·μF (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 [DC] : 630 V, Capacitance tolerance : ±5 % (J), ±10 % (K)
[Lead pitch : 22.5 mm]

Part No	Cap. (μF)	Dimensions (mm)							Min. order Q'ty (PCS)	
		L	T	H	F	Φd	P	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()										

* () : Suffix for lead crimped

[Lead pitch : 27.5 mm]

Part No	Cap. (μF)	Dimensions (mm)							Min. order Q'ty (PCS)	
		L	T	H	F	Φd	P	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

* □ : Capacitance tolerance code

* () : Suffix for lead crimped

Rating · Dimensions · Quantity

■ Rated voltage [DC] : 700 V, Capacitance tolerance : $\pm 5\%$ (J), $\pm 10\%$ (K)

NEW Part No	Cap. (μ F)	Dimensions (mm)							Min. order Q'ty (PCS)	
		L	T	H	F	Φ d	P	Q	Straight	Cut lead
		ECWFG70105□()	1.0	31.5	9.5	18.0	27.5	1.0		
ECWFG70155□()	1.5	31.5	10.5	21.0	27.5	1.0	0 \pm 0.8	2.0	300	300
ECWFG70205□()	2.0	31.5	12.0	24.5	27.5	1.0	0 \pm 0.8	2.0	200	250
ECWFG70225□()	2.2	31.5	12.0	24.5	27.5	1.0	0 \pm 0.8	2.0	200	250
ECWFG70305□()	3.0	31.5	13.5	28.5	27.5	1.0	0 \pm 0.8	2.0	150	150
ECWFG70395□()	3.9	31.5	17.5	32.5	27.5	1.0	0 \pm 0.8	2.0	100	100
ECWFG70475□()	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 [DC] : 800 V, Capacitance tolerance : $\pm 5\%$ (J)

NEW Part No	Cap. (μ F)	Dimensions (mm)							Min. order Q'ty (PCS)	
		L	T	H	F	Φ d	P	Q	Straight	Cut lead
		ECWFG80205J()	2.0	31.5	10.5	21.0	27.5	0.8		
ECWFG80225J()	2.2	31.5	10.5	21.0	27.5	0.8	0 \pm 1.0	2.0	300	300
ECWFG80275J()	2.7	31.5	12.0	24.5	27.5	0.8	0 \pm 1.0	2.0	200	250
ECWFG80305J()	3.0	31.5	12.0	24.5	27.5	0.8	0 \pm 1.0	2.0	200	250
ECWFG80335J()	3.3	31.5	12.0	24.5	27.5	0.8	0 \pm 1.0	2.0	200	250
ECWFG80355J()	3.5	31.5	13.5	28.5	27.5	0.8	0 \pm 1.0	2.0	150	150
ECWFG80395J()	3.9	31.5	13.5	28.5	27.5	0.8	0 \pm 1.0	2.0	150	150
ECWFG80405J()	4.0	31.5	13.5	28.5	27.5	0.8	0 \pm 1.0	2.0	150	150
ECWFG80475J()	4.7	31.5	13.5	28.5	27.5	0.8	0 \pm 1.0	2.0	150	150
ECWFG80505J()	5.0	31.5	16.0	29.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80565J()	5.6	31.5	16.0	29.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80605J()	6.0	31.5	16.0	29.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80685J()	6.8	31.5	17.5	32.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80705J()	7.0	31.5	17.5	32.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80755J()	7.5	31.5	17.5	32.5	27.5	0.8	0 \pm 1.0	2.0	150	100
ECWFG80805J()	8.0	31.5	17.5	32.5	27.5	0.8	0 \pm 1.0	2.0	150	100

* () : Suffix for lead crimped

■ Rated voltage [DC] : 1100 V, Capacitance tolerance : $\pm 5\%$ (J)

NEW Part No	Cap. (μ F)	Dimensions (mm)							Min. order Q'ty (PCS)	
		L	T	H	F	Φ d	P	Q	Straight	Cut lead
		ECWFG1B105J()	1.0	31.5	10.5	21.0	27.5	0.8		
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		
ECWFG1B405J()	4.0	31.5	17.5	32.5	27.5	0.8	0 \pm 1.0	2.0	100	100
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		

* () : Suffix for lead crimped