

Metalized Polypropylene Film Capacitor

Type : **ECWFD**

Non-inductive construction using metalized Polypropylene film with flame retardant epoxy resin coating.



Features

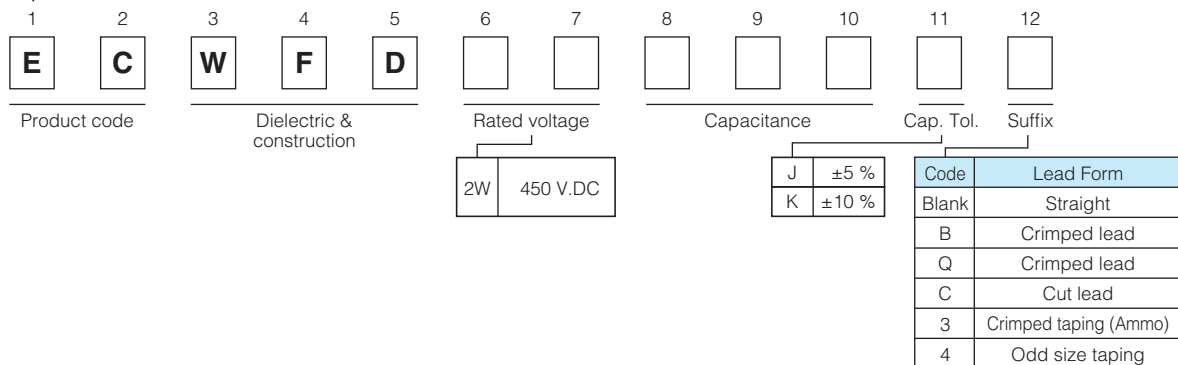
- Small size
- Low loss
- Low Hum Sound Noise
- Excellent frequency characteristics
- Flame-retardant epoxy resin coating
- RoHS directive compliant

Recommended applications

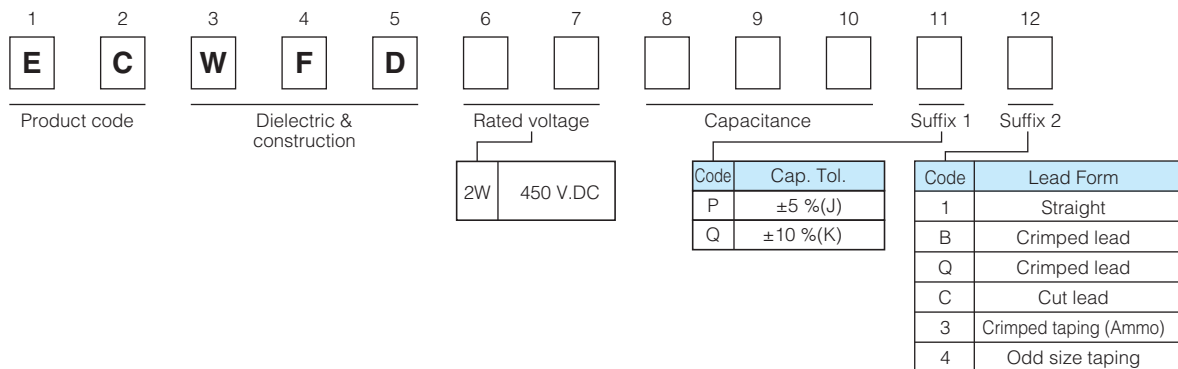
- Activ filter circuits
- High frequency and high current circuits

Explanation of part number

- Standard product



- Short lead space product (0.47 μ F, 0.68 μ F, 1.0 μ F)

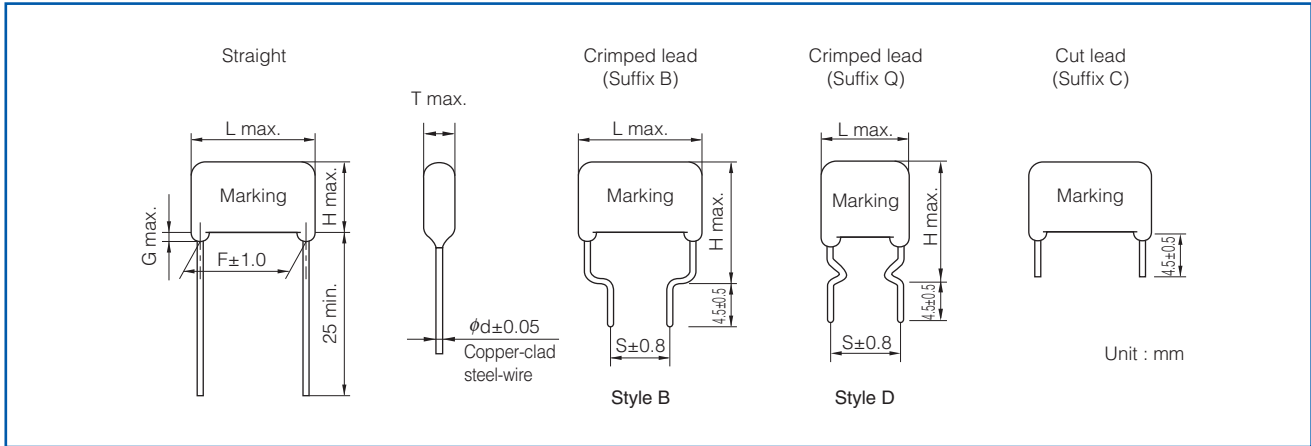


Specifications

Category temp. range (Including temperature-rise on unit surface)	- 40 °C to +110 °C
Rated voltage	450 V.DC (Derating of rated voltage by 0.62%/°C at more than 85°C Peak to peak voltage applied on the capacitor should be less than 240 Vp-p, and zero to peak voltage should be less than 450 Vo-p.)
Capacitance range	0.1 μ F to 4.7 μ F
Capacitance tolerance	±5 %(J), ±10 %(K)
Dissipation factor (tan δ)	$\tan \delta \leq 0.1 \% (20 \text{ }^\circ\text{C}, 1 \text{ kHz})$
Withstand voltage	Between terminals:Rated voltage (V.DC)×150 %, 60 s
Insulation resistance (IR)	C $\leq 0.33 \mu\text{F}$: IR $\geq 30000 \text{ M}\Omega$ C > 0.33 μ F : IR $\geq 10000 \text{ M}\Omega \cdot \mu\text{F}$ (20 °C, 100 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

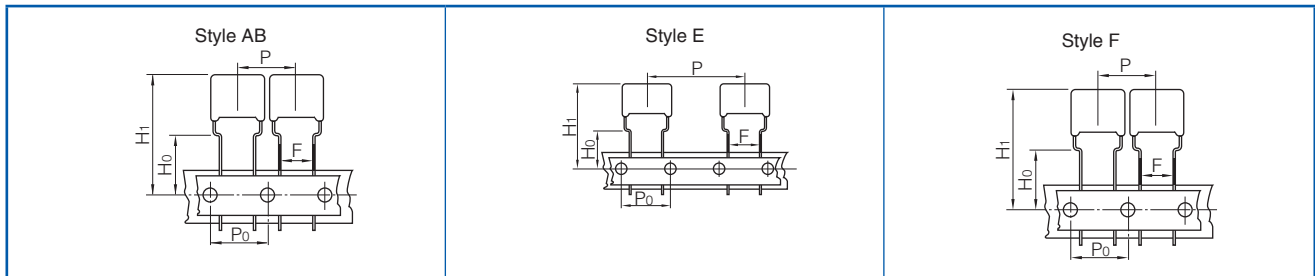


Packaging specifications for bulk package

- Packing quantity : 100 pcs./bag

Taping specifications for automatic insertion

- Taping style



- Taping style

Type	Rated voltage (V.DC)	Capacitance range (μF)	Taping style								Packing	suffix
			AD	AS	AB	B	C	D	E	F		
ECWFD	450	0.10 to 0.39			○						Ammo	3
		0.47, 0.68, 1.0			○							P3/Q3
		0.10 to 0.39								○		4
		0.47, 0.68, 1.0								○		P4/Q4
		0.47 to 2.2							○			4

* Refer to the page of taping specifications.

- Lead spacing

Style	Lead spacing
AB	5.0 mm
E	7.5 mm
F	7.5 mm

Rating · Dimensions · Quantity

● Rated voltage : 450 V.DC, Capacitance tolerance : $\pm 5\%$ (J), $\pm 10\%$ (K),

Part No.	Cap. (μ F)	Dimensions (mm)										Min. order Q'ty				
		L max.	T max.	H max.			F	S		G max.	ϕ d	Taping		Bulk		
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Crimped lead (Suffix B)	Crimped lead (Suffix Q)			5.0 mm	7.5 mm	Straight	Crimped lead	
ECWFD2W104□()	0.10	12.6	4.5	-	13.9	13.9	-	7.5	10.0	-	0.6	1500	1400	-	1000	
ECWFD2W124□()	0.12	12.6	4.6		14.0	14.0		7.5	10.0		0.6					
ECWFD2W154□()	0.15	12.6	4.6		14.1	14.1		7.5	10.0		0.6					
ECWFD2W184□()	0.18	12.6	4.8		14.3	14.3		7.5	10.0		0.6	1400	1300			
ECWFD2W224□()	0.22	12.6	5.0		14.6	14.6		7.5	10.0		0.6		1200			
ECWFD2W274□()	0.27	12.6	5.3		15.0	15.0		7.5	10.0		0.6	1300	1100			
ECWFD2W334□()	0.33	12.6	5.6		15.4	15.4		7.5	10.0		0.6	1200				
ECWFD2W394□()	0.39	12.6	6.0		15.7	15.7		7.5	10.0		0.6	1100	1000			
★ ECWFD2W474P()	0.47	12.6	6.5	11.2	16.2	16.2	10.0	7.5	10.0	1.5	0.6	1000	900			1000
ECWFD2W474Q()																
ECWFD2W474□()	0.47	17.5	5.8	9.0	14.0	16.0	15.0	7.5	15.0	1.5	0.8	-	500			
ECWFD2W564□()	0.56	17.5	6.2	9.4	14.4	16.4	15.0	7.5	15.0	1.5	0.8	-	500			
★ ECWFD2W684P()	0.68	12.6	7.7	12.4	17.4	17.4	10.0	7.5	10.0	1.5	0.6	800	700			
ECWFD2W684Q()																
ECWFD2W684□()	0.68	17.5	6.7	9.9	14.9	16.9	15.0	7.5	15.0	1.5	0.8	-	400			
ECWFD2W824□()	0.82	17.5	7.2	10.4	15.4	17.4	15.0	7.5	15.0	1.5	0.8	-	400			
★ ECWFD2W105P()	1.0	12.6	9.2	13.9	18.9	18.9	10.0	7.5	10.0	1.5	0.6	700	600			
ECWFD2W105Q()																
ECWFD2W105□()	1.0	17.5	7.8	11.0	16.0	18.0	15.0	7.5	15.0	1.5	0.8	-	400			
ECWFD2W125□()	1.2	17.5	8.5	11.6	16.6	18.6	15.0	7.5	15.0	1.5	0.8					
ECWFD2W155□()	1.5	17.5	9.3	12.5	17.5	19.5	15.0	7.5	15.0	1.5	0.8		300			
ECWFD2W185□()	1.8	17.5	10.1	13.3	18.3	20.3	15.0	7.5	15.0	1.5	0.8					
ECWFD2W225□()	2.2	17.5	11.1	14.3	19.3	21.3	15.0	7.5	15.0	1.5	0.8		200			
ECWFD2W275□()	2.7	25.3	9.0	13.7	18.7	20.7	22.5	15.0	22.5	1.5	0.8					
ECWFD2W335□()	3.3	25.3	9.8	14.6	19.6	21.6	22.5	15.0	22.5	1.5	0.8					
ECWFD2W395□()	3.9	25.3	10.7	15.4	20.4	22.4	22.5	15.0	22.5	1.5	0.8		-	800		
ECWFD2W475□()	4.7	25.3	11.7	16.4	21.4	23.4	22.5	15.0	22.5	1.5	0.8			600		
														600		

* □ : Capacitance tolerance code
() : Suffix for lead crimped

Note) Part Number marked with ★ is Short Lead Space Product.