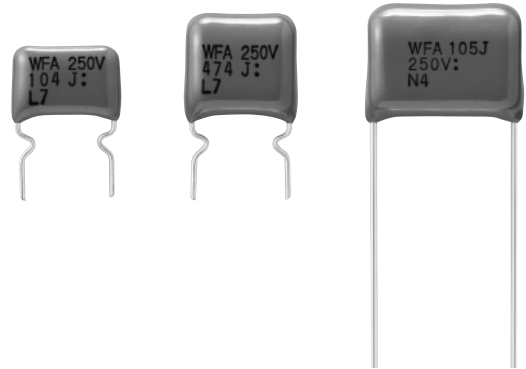


Metallized Polypropylene Film Capacitors

Type: **ECWF(A)**

Designed for high frequency and current applications.



■ Features

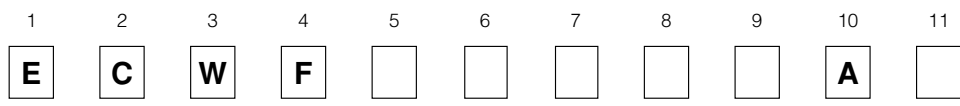
- Small size
- Excellent frequency characteristics
- Low loss
- Low Hum Sound Noise
- 85 degree C , 85%RH , 500VDC , 500 hours (630VDC)
- RoHS directive compliant

■ Recommended Applications

- 250VDC,630VDC:High frequency and high current circuits
- 450VDC:Active filter circuits

■ Explanation of Part Numbers

● 250VDC,450VDC (Bulk)

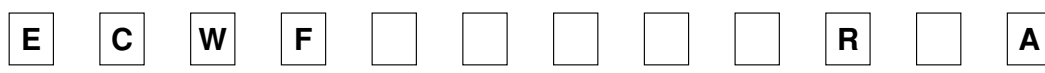


Products code Dielectric & construction Rated voltage Capacitance Cap. Tol. Suffix Suffix

2	250 VDC	H	±3 %
		J	±5 %
2W	450 VDC	J	±5 %
		K	±10 %

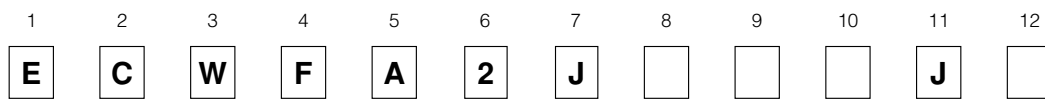
Suffix	Lead form
Blank	Straight
B	Crimped Lead
Q	Crimped Lead
C	Cut lead

● 250VDC,450VDC (Odd Size Taping)



Products code Dielectric & construction Rated voltage Capacitance Suffix Cap. Tol. Suffix

● 630VDC (Bulk, Odd Size Taping)



Products code Dielectric & construction Rated voltage Capacitance Cap. Tol. Suffix

2J	630 VDC	J	±5 %
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Suffix	Lead form
Blank	Straight
B	Crimped Lead
Q	Crimped Lead
C	Cut lead
4	Odd size taping

■ Specifications

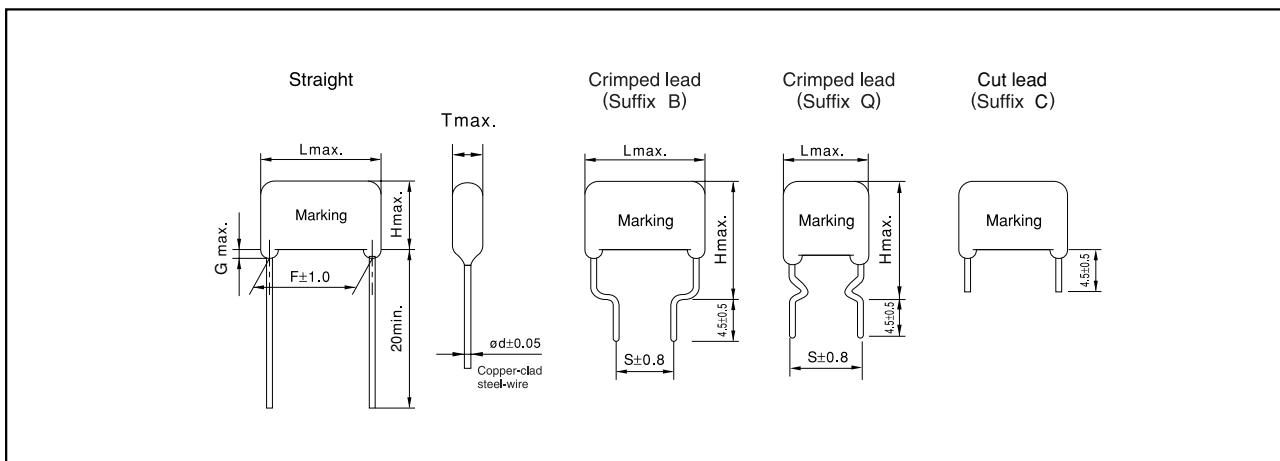
Category temp. range (Including temperature-rise on unit surface)	-40 °C to +105 °C	
Rated voltage	250 VDC	
	450 VDC (Derating of rated voltage by 1.25%/°C at more than 85°C) Peak to peak voltage applied on the capacitor should be less than 240Vp-p, and zero to peak voltage should be less than 450V.	
	630 VDC (Derating of rated voltage by 1.0%/°C at more than 85°C)	
Capacitance range	250 VDC	0.1 μF to 6.8 μF
	450 VDC	0.1 μF to 4.7 μF
	630 VDC	0.1 μF to 2.2 μF
Capacitance tolerance	250 VDC	±3 % (H), ±5 % (J)
	450 VDC	±5 % (J), ±10 % (K)
	630 VDC	±5 % (J)
Withstand voltage	Between terminals: Rated voltage (VDC) × 150 % 60 s	
Dissipation factor (tan δ)	tan δ ≤ 0.1 % (20 °C, 1 kHz)	
Insulation resistance (IR)	250 VDC	C ≤ 0.33 μF : IR ≥ 9,000 MΩ C > 0.33 μF : IR ≥ 3,000 MΩ · μF (20 °C, 100 VDC, 60 s)
	450 VDC	C ≤ 0.33 μF : IR ≥ 30,000 MΩ C > 0.33 μF : IR ≥ 10,000 MΩ · μF (20 °C, 100 VDC, 60 s)
	630 VDC	C ≤ 0.33 μF : IR ≥ 9,000 MΩ C > 0.33 μF : IR ≥ 3,000 MΩ · μF (20 °C, 500 VDC, 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".

Metalized Film

■ Dimensions in mm (not to scale)

(Dimensions : mm)

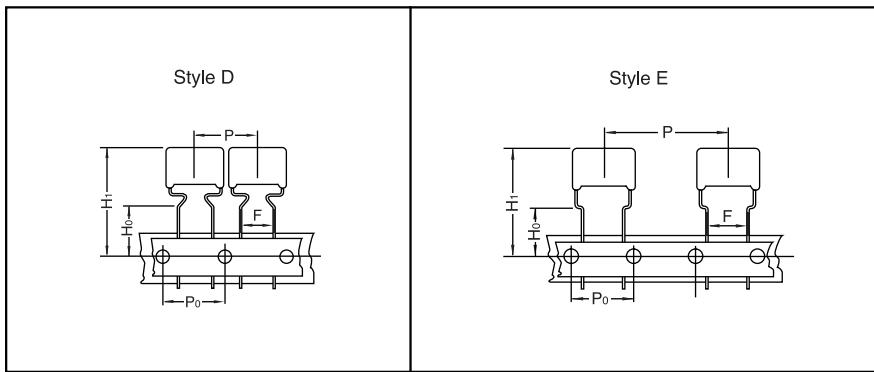


■ Packaging Specification for Bulk Package

Packing quantity: 100 pcs./bag

■ Taping Specifications for Automatic Insertion

● Taping style



*Refer to the page of taping specifications.

● Packaging Specifications

Type	Rated voltage.	Cap. range (μF)	Taping style					Packing	suffix
			AD	AS	B	C	D		
ECWF(A)	250 VDC	0.10 to 0.47					○	Ammo	R()A
		0.56 to 3.9					○		
	450 VDC	0.10 to 0.47					○		J4
		0.56 to 2.2					○		
630 VDC	0.10 to 0.68					○			

● Lead Spacing

Style	Lead Spacing
D	7.5 mm
E	7.5 mm

■ Rating, Dimensions & Quantity/Ammo Box

● Type ECWF(A) Rated voltage : 250 VDC

Part No.	Cap. (μF)	Dimensions (mm)									Min. order Qty	
		L _{max}	T _{max}	H _{max}			F	S		G _{max}		ød
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Straight	Crimped lead (Suffix B)			
ECWF2104□A()	0.10	13.0	5.0		14.1	14.1		7.5	10.0		0.6	1300
ECWF2124□A()	0.12	13.0	5.3		14.4	14.4		7.5	10.0		0.6	1200
ECWF2154□A()	0.15	13.0	5.6		14.7	14.7		7.5	10.0		0.6	1000
ECWF2184□A()	0.18	13.0	5.9		15.1	15.1		7.5	10.0		0.6	
ECWF2224□A()	0.22	13.0	6.3		15.4	15.4		7.5	10.0		0.6	1000
ECWF2274□A()	0.27	13.0	6.8		15.9	15.9		7.5	10.0		0.6	800
ECWF2334□A()	0.33	13.0	7.3		16.4	16.4		7.5	10.0		0.6	
ECWF2394□A()	0.39	13.0	7.8		16.9	16.9		7.5	10.0		0.6	800
ECWF2474□A()	0.47	13.0	8.4		17.6	17.6		7.5	10.0		0.6	600
ECWF2564□A()	0.56	18.1	6.9		16.4	18.4		7.5	15.0		0.8	400
ECWF2684□A()	0.68	18.1	7.4		17.0	19.0		7.5	15.0		0.8	
ECWF2824□A()	0.82	18.1	8.0		17.6	19.6		7.5	15.0		0.8	
ECWF2105□A()	1.0	18.1	8.5	13.3	18.3	20.3	15.0	7.5	15.0	1.5	0.8	300
ECWF2125□A()	1.2	18.8	9.5	14.6	19.6	21.6	15.0	7.5	15.0	1.5	0.8	
ECWF2155□A()	1.5	18.8	10.5	15.6	20.6	22.6	15.0	7.5	15.0	1.5	0.8	200
ECWF2185□A()	1.8	18.8	11.4	16.5	21.5	23.5	15.0	7.5	15.0	1.5	0.8	
ECWF2225□A()	2.2	18.8	12.6	17.6	22.6	24.6	15.0	7.5	15.0	1.5	0.8	
ECWF2275□A()	2.7	23.8	11.4	17.2	22.2	24.2	20.0	12.5	20.0	1.5	0.8	300
ECWF2335□A()	3.3	23.8	12.5	18.3	23.3	25.3	20.0	12.5	20.0	1.5	0.8	200
ECWF2395□A()	3.9	23.8	13.5	19.3	24.3	26.3	20.0	12.5	20.0	1.5	0.8	
ECWF2475□A()	4.7	23.8	14.8	20.6	25.6	27.6	20.0	12.5	20.0	1.5	0.8	
ECWF2565□A()	5.6	23.8	16.2	21.9	26.9	28.9	20.0	12.5	20.0	1.5	0.8	
ECWF2685□A()	6.8	23.8	17.8	23.5	28.5	30.5	20.0	12.5	20.0	1.5	0.8	

□ Suffix for lead crimped
 ○ Capacitance tolerance code

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■ Rating, Dimensions & Quantity/Ammo Box

● Type ECWF(A) Rated voltage : 450 VDC

Part No.	Cap. (μ F)	Dimensions (mm)										Min. order Qty		
		L _{max}	T _{max}	H _{max}			F	S		G _{max}	ϕ d		Taping 7.5mm	
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Crimped lead (Suffix B)	Crimped lead (Suffix Q)					
ECWF2W104□A()	0.10	13.0	5.1	—	—	—	—	7.5	10.0	1.5	0.6	1200		
ECWF2W124□A()	0.12	13.0	5.4					14.3	14.3	7.5	10.0		1.5	0.6
ECWF2W154□A()	0.15	13.0	5.7					14.5	14.5	7.5	10.0		1.5	0.6
ECWF2W184□A()	0.18	13.0	6.1					14.9	14.9	7.5	10.0		1.5	0.6
ECWF2W224□A()	0.22	13.0	6.5					15.2	15.2	7.5	10.0		1.5	0.6
ECWF2W274□A()	0.27	13.0	7.0					15.6	15.6	7.5	10.0		1.5	0.6
ECWF2W334□A()	0.33	13.0	7.6					16.1	16.1	7.5	10.0		1.5	0.6
ECWF2W394□A()	0.39	13.0	8.1					16.7	16.7	7.5	10.0		1.5	0.6
ECWF2W474□A()	0.47	13.0	8.7					17.2	17.2	7.5	10.0		1.5	0.6
ECWF2W564□A()	0.56	18.1	7.0	17.9	17.9	7.5	10.0	1.5	0.6	600				
ECWF2W684□A()	0.68	18.1	7.5	11.5	16.5	18.5	15.0	7.5	15.0	1.5	0.8	400		
ECWF2W824□A()	0.82	18.1	8.2	12.1	17.1	19.1	15.0	7.5	15.0	1.5	0.8			
ECWF2W105□A()	1.0	18.1	9.3	12.7	17.7	19.7	15.0	7.5	15.0	1.5	0.8			
ECWF2W125□A()	1.2	18.8	9.7	12.6	17.6	19.6	15.0	7.5	15.0	1.5	0.8	300		
ECWF2W155□A()	1.5	18.8	10.7	14.7	19.7	21.7	15.0	7.5	15.0	1.5	0.8			
ECWF2W185□A()	1.8	18.8	11.6	15.8	20.8	22.8	15.0	7.5	15.0	1.5	0.8			
ECWF2W225□A()	2.2	18.8	12.8	16.7	21.7	23.7	15.0	7.5	15.0	1.5	0.8	200		
ECWF2W275□A()	2.7	26.3	10.6	17.9	22.9	24.9	15.0	7.5	15.0	1.5	0.8			
ECWF2W335□A()	3.3	26.3	11.7	16.5	21.5	23.5	22.5	15.0	22.5	1.5	0.8			
ECWF2W395□A()	3.9	26.3	12.6	17.5	22.5	24.5	22.5	15.0	22.5	1.5	0.8	—		
ECWF2W475□A()	4.7	26.3	13.8	18.4	23.4	25.4	22.5	15.0	22.5	1.5	0.8			
ECWF2W475□A()	4.7	26.3	13.8	19.6	24.6	26.6	22.5	15.0	22.5	1.5	0.8			

↑ Suffix for lead crimped
 ↑ Capacitance tolerance code

● Type ECWF(A) Rated voltage : 630 VDC

Part No.	Cap. (μ F)	Dimensions (mm)										Min. order Qty	
		L _{max}	T _{max}	H _{max}			F	S		G _{max}	ϕ d		Taping 7.5mm
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Crimped lead (Suffix B)	Crimped lead (Suffix Q)				
ECWFA2J104J()	0.10	18.2	5.2	10.4	15.4	15.4	15.0	7.5	15.0	1.5	0.6	600	
ECWFA2J124J()	0.12	18.2	5.5	10.8	15.8	15.8	15.0	7.5	15.0	1.5	0.6		
ECWFA2J154J()	0.15	18.2	6.0	11.2	16.2	16.2	15.0	7.5	15.0	1.5	0.6		
ECWFA2J184J()	0.18	18.2	6.5	11.7	16.7	16.7	15.0	7.5	15.0	1.5	0.6	500	
ECWFA2J224J()	0.22	18.2	7.1	12.3	17.3	17.3	15.0	7.5	15.0	1.5	0.6		
ECWFA2J274J()	0.27	18.2	7.8	12.9	17.9	17.9	15.0	7.5	15.0	1.5	0.6		
ECWFA2J334J()	0.33	18.2	8.5	13.6	18.6	18.6	15.0	7.5	15.0	1.5	0.6	400	
ECWFA2J394J()	0.39	18.2	9.2	14.3	19.3	19.3	15.0	7.5	15.0	1.5	0.6		
ECWFA2J474J()	0.47	18.2	10.0	15.1	20.1	20.1	15.0	7.5	15.0	1.5	0.6		
ECWFA2J564J()	0.56	18.2	10.9	16.0	21.0	21.0	15.0	7.5	15.0	1.5	0.6	300	
ECWFA2J684J()	0.68	18.1	12.0	17.1	22.1	22.1	15.0	7.5	15.0	1.5	0.6		
ECWFA2J824J()	0.82	26.0	10.1	16.0	21.0	21.0	15.0	7.5	15.0	1.5	0.6		
ECWFA2J105J()	1.0	26.0	11.1	15.3	20.3	22.3	22.5	15.0	22.5	1.5	0.8	200	
ECWFA2J125J()	1.2	26.0	12.1	16.2	21.2	23.2	22.5	15.0	22.5	1.5	0.8		
ECWFA2J155J()	1.5	26.0	13.5	17.2	22.2	24.2	22.5	15.0	22.5	1.5	0.8		
ECWFA2J185J()	1.8	26.0	14.8	18.6	23.6	25.6	22.5	15.0	22.5	1.5	0.8	—	
ECWFA2J225J()	2.2	26.0	16.3	19.8	24.8	26.8	22.5	15.0	22.5	1.5	0.8		
ECWFA2J225J()	2.2	26.0	16.3	21.4	26.4	28.4	22.5	15.0	22.5	1.5	0.8		

↑ Suffix for lead crimped

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