

## Metallized Polypropylene Film Capacitor

**ECWFE** series

**UPGRADE**



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

### Features

- Small size
- Excellent frequency characteristics
- Low loss
- Flame retardant plastic case and non-combustible resin
- Low hum sound noise
- RoHS compliant

### Recommended applications

- Active filter circuit
- High frequency circuit

### Explanation of part number

- Standard

1	2	3	4	5	6	7	8	9	10	11	12														
<b>E</b>	<b>C</b>	<b>W</b>	<b>F</b>	<b>E</b>																					
Product code		Dielectric & construction			Rated voltage		Capacitance			Cap. Tol.	Suffix														
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- Special lead space product

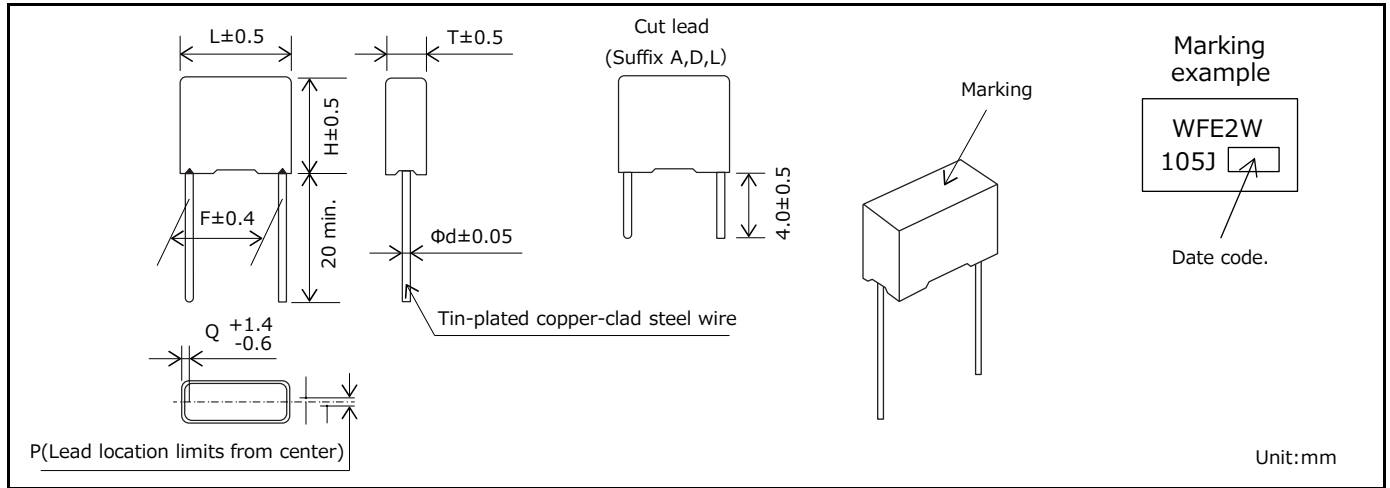
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### Specifications

Category temp. range (Including temperature-rise on unit surface)	-40 °C to +105 °C	
Rated voltage	450 V.DC	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. (Derating of rated voltage by 1.25 %/°C at more than 85 °C)
	630 V.DC	Peak to peak voltage applied on the capacitor should be less than 400 Vp-p, and zero to peak voltage should be less than 630 Vo-p. (Derating of rated voltage by 1.0%/°C at more than 85 °C)
Capacitance range	450 V.DC	0.1 μF to 4.7 μF
	630 V.DC	0.1 μF to 2.2 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)	450 V.DC	C ≤ 0.33 μF : IR ≥ 30,000 MΩ C > 0.33 μF : IR ≥ 10,000 MΩ·μF (20 °C, 100 V.DC, 60 s)
	630 V.DC	C ≤ 0.33 μF : IR ≥ 9,000 MΩ C > 0.33 μF : 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 : 450 V.DC, Capacitance tolerance : ±5 % (J), ± 10 % (K)

Part No.	Cap. (μF)	Dimensions (mm)							Min. order Q'ty	
		L	T	H	F	Φd	P	Q	Straight	Cut lead
ECWFE2W104□( )	0.10	13.0	5.0	10.5	10.0	0.6	0±0.8	1.5	1000	1000
<b>NEW</b> ECWFE2W104P( )	0.10	17.5	5.0	10.5	15.0	0.6	0±0.8	1.25		
<b>NEW</b> ECWFE2W104Q( )										
ECWFE2W154□( )	0.15	13.0	5.0	10.5	10.0	0.6	0±0.8	1.5		
<b>NEW</b> ECWFE2W154P( )	0.15	17.5	5.0	10.5	15.0	0.6	0±0.8	1.25		
<b>NEW</b> ECWFE2W154Q( )										
ECWFE2W224□( )	0.22	13.0	6.0	12.0	10.0	0.6	0±0.8	1.5		
<b>NEW</b> ECWFE2W224P( )	0.22	17.5	5.0	10.5	15.0	0.6	0±0.8	1.25		
<b>NEW</b> ECWFE2W224Q( )										
ECWFE2W334□( )	0.33	13.0	6.0	12.0	10.0	0.6	0±0.8	1.5		
<b>NEW</b> ECWFE2W334P( )	0.33	17.5	5.0	10.5	15.0	0.6	0±0.8	1.25		
<b>NEW</b> ECWFE2W334Q( )										
<b>NEW</b> ECWFE2W474P( )	0.47	13.0	7.0	12.5	10.0	0.6	0±0.8	1.5		
<b>NEW</b> ECWFE2W474Q( )										
ECWFE2W474□( )	0.47	17.5	6.0	11.5	15.0	0.8	0±0.8	1.3		
ECWFE2W684□( )	0.68	17.5	7.0	12.5	15.0	0.8	0±0.8	1.3		
ECWFE2W105□( )	1.0	17.5	7.0	12.5	15.0	0.8	0±0.8	1.3		
ECWFE2W155□( )	1.5	17.5	10.0	15.5	15.0	0.8	0±0.8	1.3	600	
<b>NEW</b> ECWFE2W155P( )	1.5	31.0	9.0	19.0	27.5	0.8	0±0.8	1.75	400	300
<b>NEW</b> ECWFE2W155Q( )										
ECWFE2W225□( )	2.2	17.5	10.0	15.5	15.0	0.8	0±0.8	1.3	1000	600
<b>NEW</b> ECWFE2W225P( )	2.2	31.0	11.0	21.0	27.5	0.8	0±0.8	1.75	200	200
<b>NEW</b> ECWFE2W225Q( )										
ECWFE2W335□( )	3.3	26.0	10.0	17.0	22.5	0.8	0±0.8	1.8	500	300
<b>NEW</b> ECWFE2W335P( )	3.3	31.0	13.0	23.0	27.5	0.8	0±0.8	1.75	200	200
<b>NEW</b> ECWFE2W335Q( )										
ECWFE2W475□( )	4.7	26.0	12.0	19.0	22.5	0.8	0±0.8	1.8	300	200
<b>NEW</b> ECWFE2W475P( )	4.7	31.0	15.5	25.5	27.5	0.8	0±0.8	1.75	150	100
<b>NEW</b> ECWFE2W475Q( )										

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

Note) Part number marked with bold is special lead space product.

The capacitance of 0.10 μF, 0.15 μF, 0.22 μF, 0.33 μF, 3.3 μF, 4.7 μF are "5" or "D"  
 The capacitance of 0.47 μF is "1" or "A"  
 The capacitance of 1.5 μF, 2.2 μF are "8" or "L"

## Rating · Dimensions · Quantity

- Rated voltage : 630 V.DC, Capacitance tolerance :  $\pm 5\%$ (J),  $\pm 10\%$ (K)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Min. order Q'ty	
		L	T	H	F	$\Phi$ d	P	Q	Straight	Cut lead
ECWFE2J104□( )	0.10	17.5	5.0	10.5	15.0	0.6	0 $\pm$ 0.8	1.3	1000	1000
<b>NEW</b> ECWFE2J104P( )	0.10	26.0	6.0	13.0	22.5	0.8	0 $\pm$ 0.8	1.75	900	700
<b>NEW</b> ECWFE2J104Q( )										
ECWFE2J154□( )	0.15	17.5	6.0	11.5	15.0	0.6	0 $\pm$ 0.8	1.3	1000	1000
<b>NEW</b> ECWFE2J154P( )	0.15	26.0	6.0	13.0	22.5	0.8	0 $\pm$ 0.8	1.75	900	700
<b>NEW</b> ECWFE2J154Q( )										
ECWFE2J224□( )	0.22	17.5	7.0	12.5	15.0	0.6	0 $\pm$ 0.8	1.3	1000	1000
<b>NEW</b> ECWFE2J224P( )	0.22	26.0	6.0	13.0	22.5	0.8	0 $\pm$ 0.8	1.75	900	700
<b>NEW</b> ECWFE2J224Q( )										
ECWFE2J334□( )	0.33	17.5	8.5	14.5	15.0	0.6	0 $\pm$ 0.8	1.3	1000	800
<b>NEW</b> ECWFE2J334P( )	0.33	26.0	7.0	14.0	22.5	0.8	0 $\pm$ 0.8	1.75	700	500
<b>NEW</b> ECWFE2J334Q( )										
ECWFE2J474□( )	0.47	17.5	10.0	15.5	15.0	0.6	0 $\pm$ 0.8	1.3	1000	600
<b>NEW</b> ECWFE2J474P( )	0.47	26.0	8.0	15.0	22.5	0.8	0 $\pm$ 0.8	1.75	600	400
<b>NEW</b> ECWFE2J474Q( )										
ECWFE2J684□( )	0.68	17.5	11.0	17.5	15.0	0.6	0 $\pm$ 0.8	1.3	600	600
ECWFE2J105□( )	1.0	26.0	10.0	17.0	22.5	0.8	0 $\pm$ 0.8	1.8	500	300
<b>NEW</b> ECWFE2J105P( )	1.0	31.0	9.0	19.0	27.5	0.8	0 $\pm$ 0.8	1.75	400	
<b>NEW</b> ECWFE2J105Q( )										
ECWFE2J155□( )	1.5	26.0	12.0	19.0	22.5	0.8	0 $\pm$ 0.8	1.8	300	200
<b>NEW</b> ECWFE2J155P( )	1.5	31.0	11.0	21.0	27.5	0.8	0 $\pm$ 0.8	1.75	200	
<b>NEW</b> ECWFE2J155Q( )										
ECWFE2J225□( )	2.2	26.0	16.0	23.0	22.5	0.8	0 $\pm$ 0.8	1.8	200	
<b>NEW</b> ECWFE2J225P( )	2.2	31.0	13.0	23.0	27.5	0.8	0 $\pm$ 0.8	1.75	200	
<b>NEW</b> ECWFE2J225Q( )										

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

Note) Part Number marked with bold is Special Lead space product.

The capacitance of 0.10  $\mu$ F, 0.15  $\mu$ F, 0.22  $\mu$ F, 0.33  $\mu$ F, 0.47  $\mu$ F, 1.0  $\mu$ F, 1.5  $\mu$ F, 2.2  $\mu$ F are "5" or "D"

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