

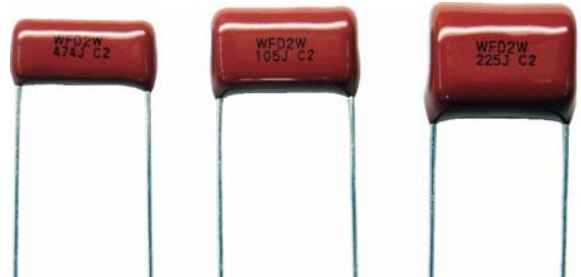
## Metallized Polypropylene Film Capacitors

Type: **ECWFD**

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

### ■ Features

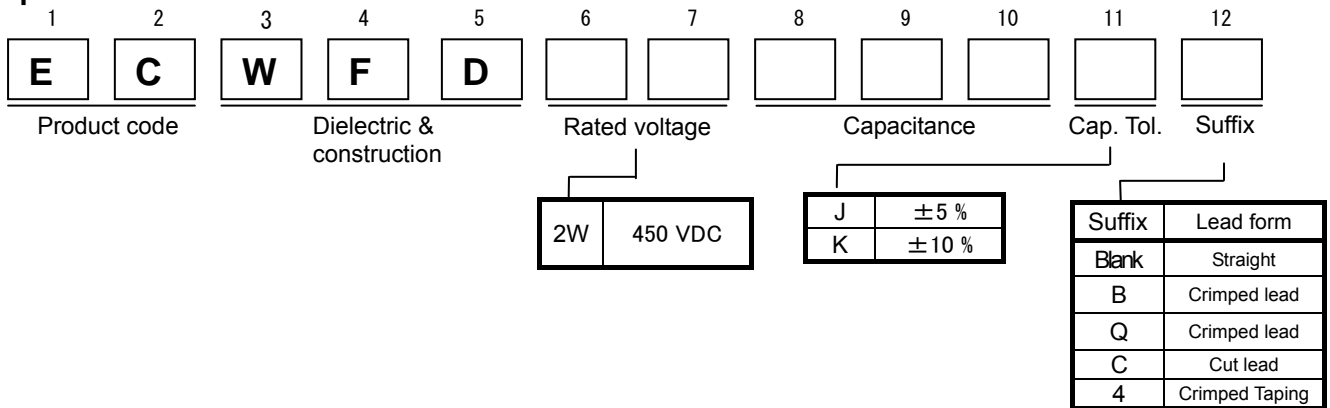
- Small size
- Excellent frequency characteristics
- Low loss
- Flame retardant epoxy resin coating
- Low Hum Sound Noise
- RoHS directive compliant



### ■ Recommended Applications

- Active filter circuits
- High frequency and high current circuits

### ■ Explanation of Part Numbers



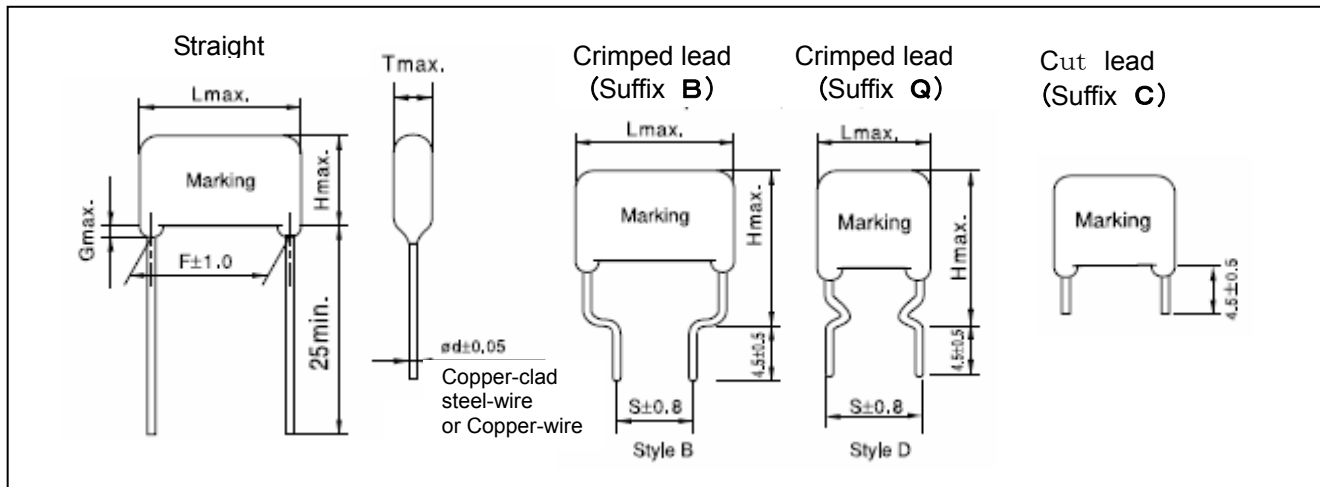
### ■ Specifications

Category temp. range (Including temperature-rise on unit surface)	-40 °C to +105 °C
Rated voltage	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.
Capacitance range	0.47 uF to 2.2 uF
Capacitance tolerance	±5% (J), ±10 % (K)
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)	IR ≥ 10,000 MΩ · uF (20 °C, 100 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".

## ■ Dimensions in mm (not to scale)

(Dimensions : mm)

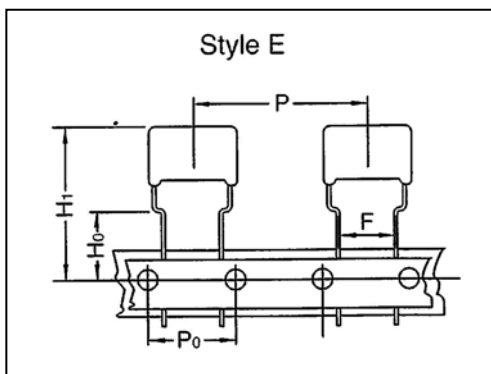


## ■ Packaging Specification for Bulk Package

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 (uF)	Taping Style					Packing	Suffix	
			AD	AS	B	C	D			E
ECWFD	450 VDC	0.47 to 2.2						○	Ammo	4

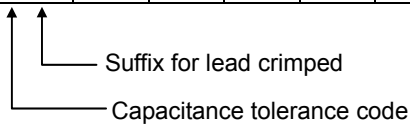
### ● Lead Spacing

Style	Lead spacing
E	7.5 mm

## ■ Rating, Dimension & Quantity / Ammo Box

● Type ECWFD Rated voltage : 450VDC

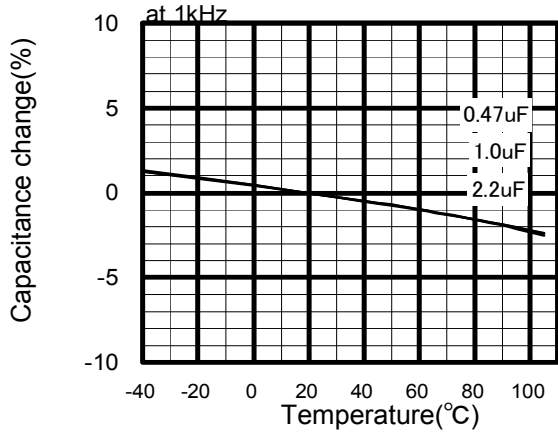
Part No.	Capacitance (μF)	Dimensions (mm)										Min. Order Qty	
		L <sup>max</sup>	T <sup>max</sup>	H <sup>max</sup>			F	S		G <sup>max</sup>	Φd	Taping 7.5mm	Bulk
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Crimped lead (Suffix B)	Crimped lead (Suffix Q)				
ECWFD2W474□( )	0.47	17.5	5.8	9.0	14.0	16.0	15.0	7.5	10.0	1.5	0.8	500	1000
ECWFD2W564□( )	0.56	17.5	6.2	9.4	14.4	16.4	15.0	7.5	15.0	1.5	0.8		
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		
ECWFD2W105□( )	1.00	17.5	7.8	11.0	16.0	18.0	15.0	7.5	15.0	1.5	0.8	300	
ECWFD2W125□( )	1.20	17.5	8.5	11.6	16.6	18.6	15.0	7.5	15.0	1.5	0.8		
ECWFD2W155□( )	1.50	17.5	9.3	12.5	17.5	19.5	15.0	7.5	15.0	1.5	0.8	200	
ECWFD2W185□( )	1.80	17.5	10.1	13.3	18.3	20.3	15.0	7.5	15.0	1.5	0.8		
ECWFD2W225□( )	2.20	17.5	11.1	14.3	19.3	21.3	15.0	7.5	15.0	1.5	0.8		



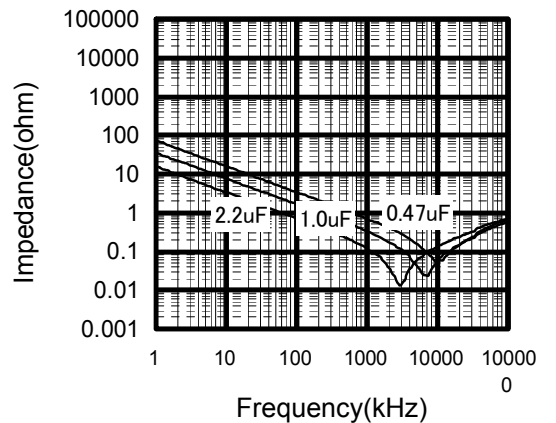
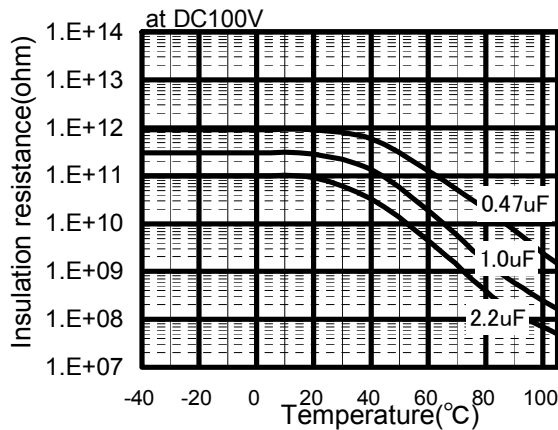
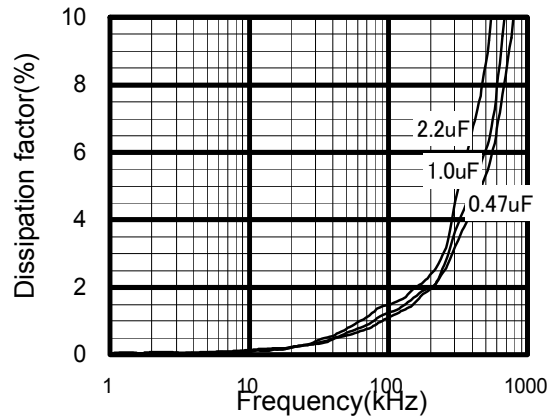
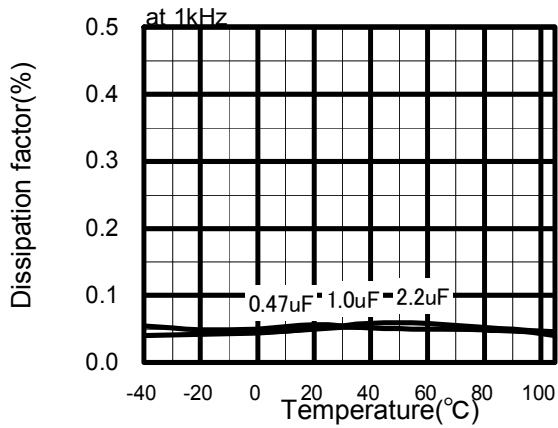
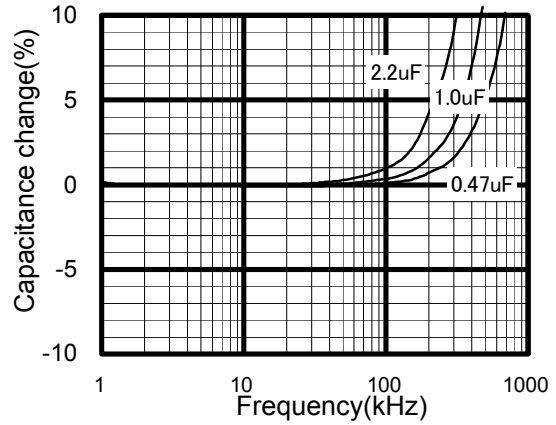
**ECWFD Type DC450V series (Metallized Polypropylene Film)**

**Electrical Characteristics <Typical Data >**

**Temperature Characteristics**

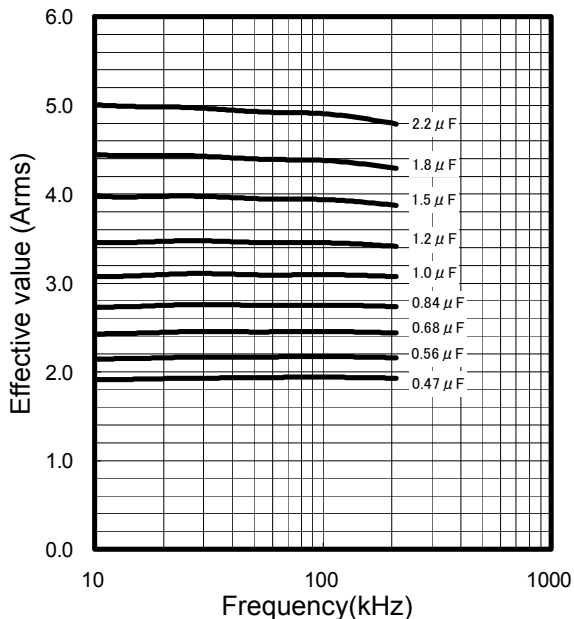


**Frequency Characteristics**

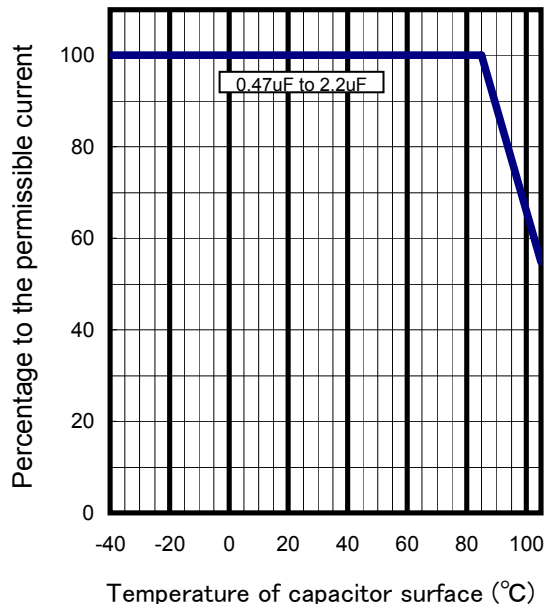


**ECWFD Type DC450V series (Metallized Polypropylene Film)**  
**Applicable Specifications**

**Permissible Current**



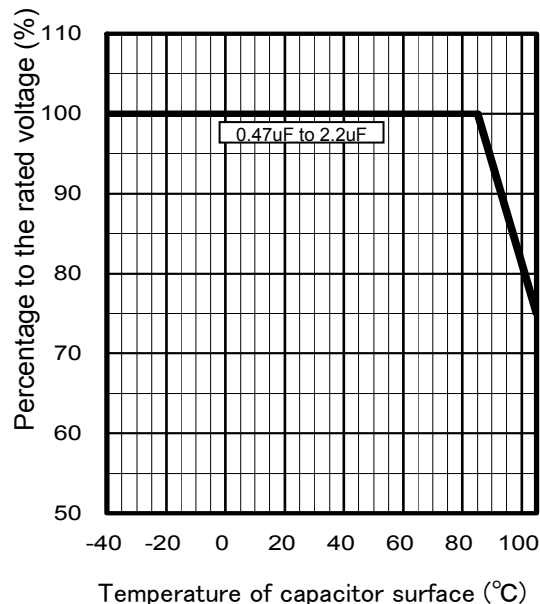
**Permissible Current Derating by Temperature**



**Pulse Handling Capability (dv/dt)**  
 (Max 10000cycles)

Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 450V	0.47	474	24.3	11.4
	0.56	564		13.6
	0.68	684		16.5
	0.82	824		19.9
	1.00	105		24.3
	1.20	125		29.1
	1.50	155		36.4
	1.80	185		43.7
	2.20	225		53.4

**Voltage Derating by Temperature**



\*Please consult Panasonic if your condition exceeds the above  
 \*P When you use this product, peak voltage must not exceed DC rated voltage.  
 \*The current(0-P) value is calculated using nominal capacitance.