

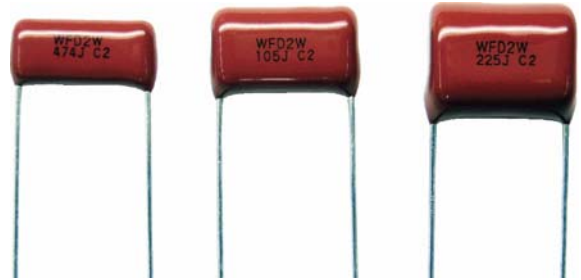
Metallized Polypropylene Film Capacitors

Type: **ECWFD**

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

■ Features

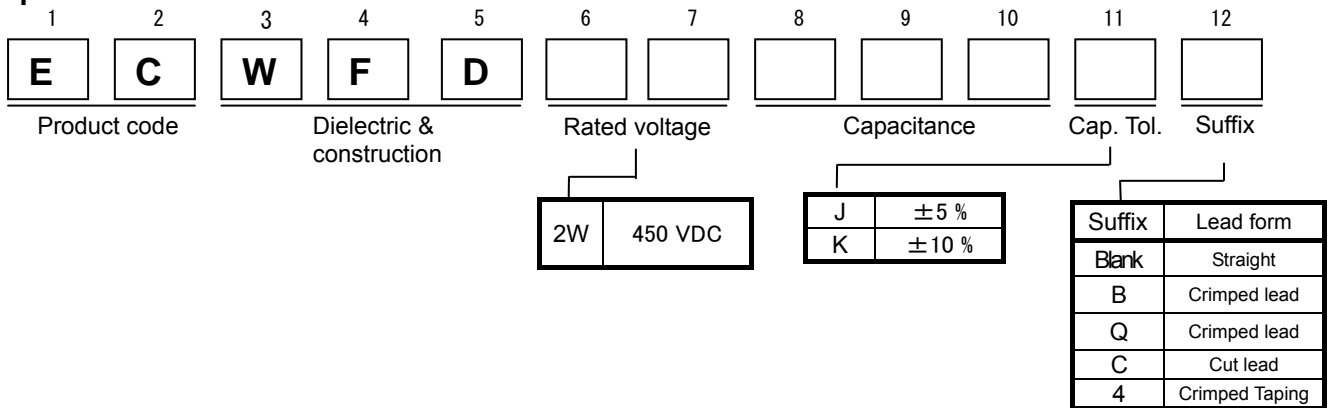
- Small size
- Excellent frequency characteristics
- Low loss
- Flame retardant epoxy resin coating
- Low Hum Sound Noise
- RoHS directive compliant



■ Recommended Applications

- Active filter circuits
- High frequency and high current circuits

■ Explanation of Part Numbers



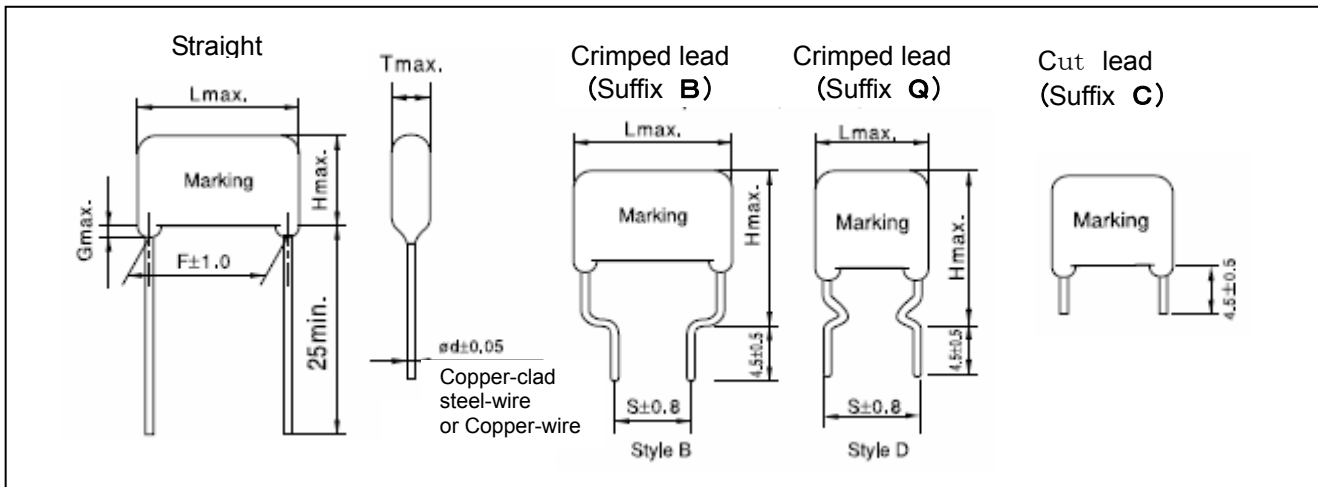
■ Specifications

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)

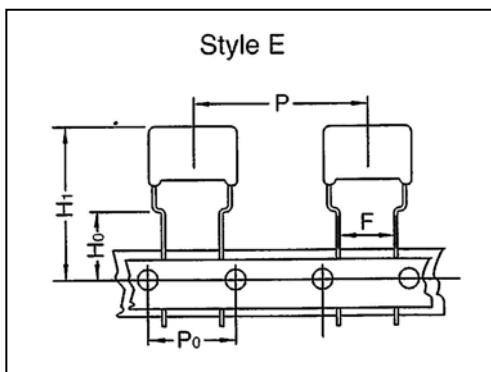


■ Packaging Specification for Bulk Package

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

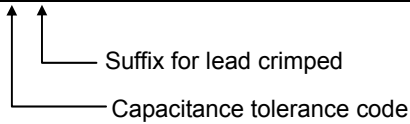
● Lead Spacing

Style	Lead spacing
E	7.5 mm

■ Rating, Dimension & Quantity / Ammo Box

● Type ECWFD Rated voltage : 450VDC

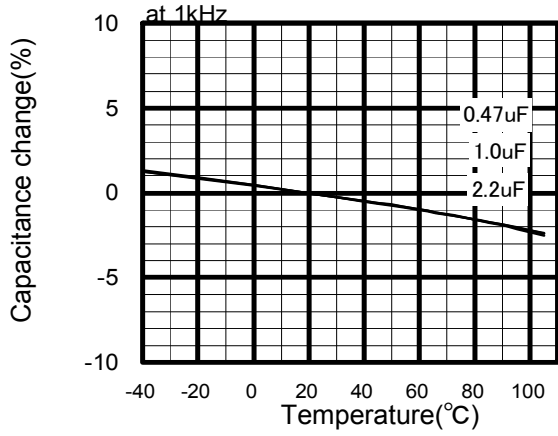
Part No.	Capacitance (μF)	Dimensions (mm)										Min. Order Qty	
		L ^{max}	T ^{max}	H ^{max}			F	S		G ^{max}	Φd	Taping 7.5mm	Bulk
				Straight	Crimped lead (Suffix B)	Crimped lead (Suffix Q)		Crimped lead (Suffix B)	Crimped lead (Suffix Q)				
ECWFD2W474□()	0.47	17.5	5.8	9.0	14.0	16.0	15.0	7.5	10.0	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		



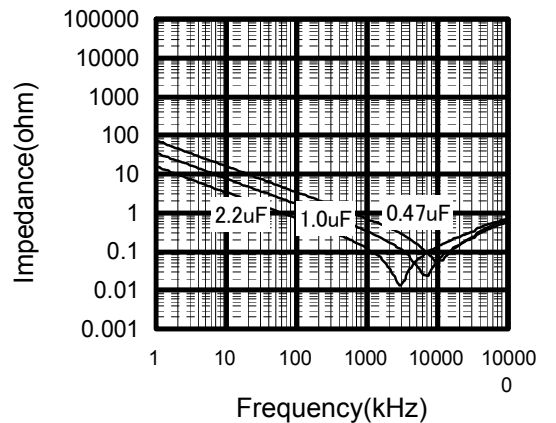
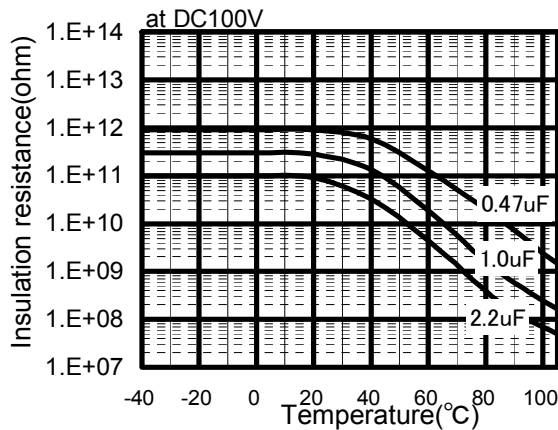
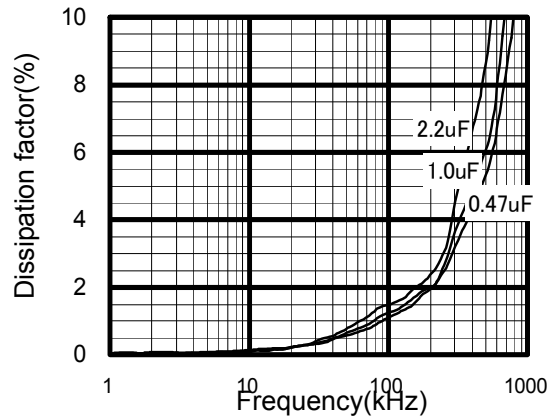
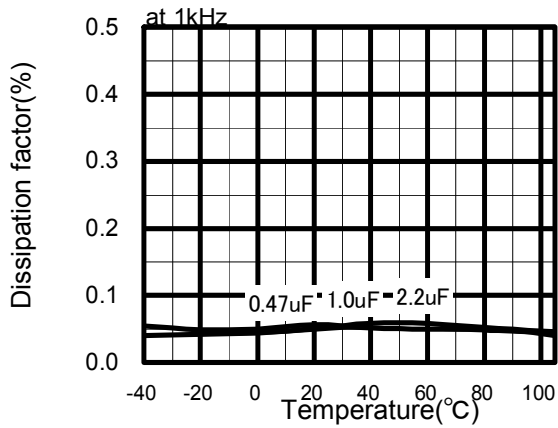
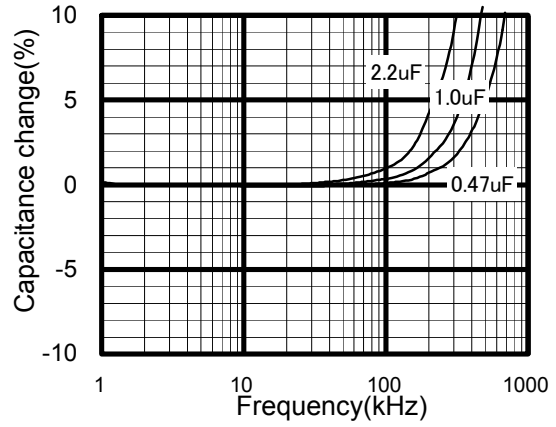
ECWFD Type DC450V series (Metallized Polypropylene Film)

Electrical Characteristics <Typical Data >

Temperature Characteristics

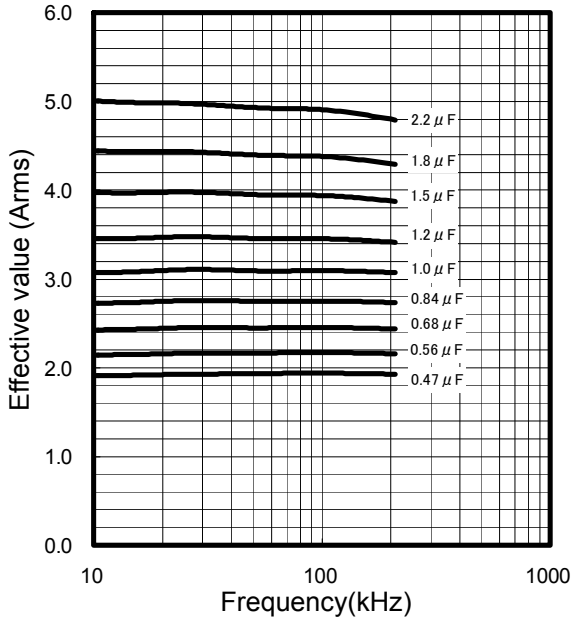


Frequency Characteristics

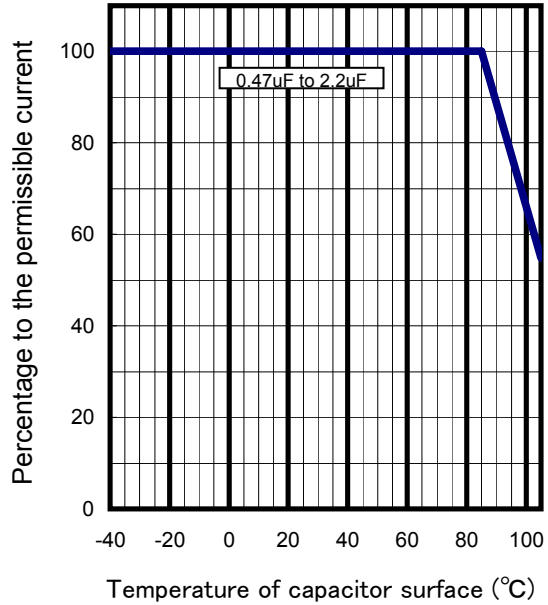


ECWFD Type DC450V series (Metallized Polypropylene Film)
Applicable Specifications

Permissible Current



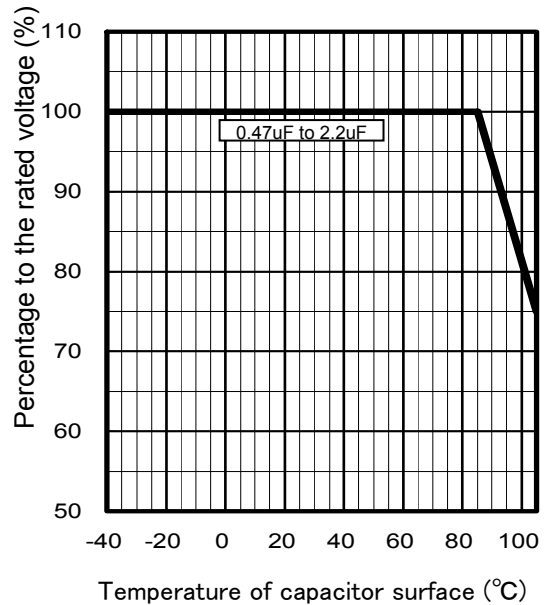
Permissible Current Derating by Temperature



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.