

Metalized Polypropylene Film Capacitors

Type: **ECWFE**

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

■ Features

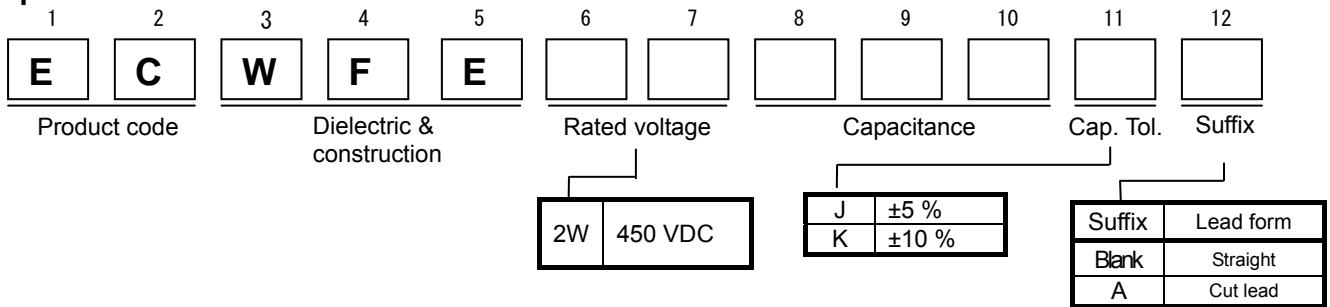
- Small size
- Excellent frequency characteristics
- Low loss
- Flame retardant epoxy resin coating
- Low Hum Sound Noise
- RoHS directive compliant

■ Recommended Applications

- Active filter circuits
- High frequency and high current circuits



■ Explanation of Part Numbers



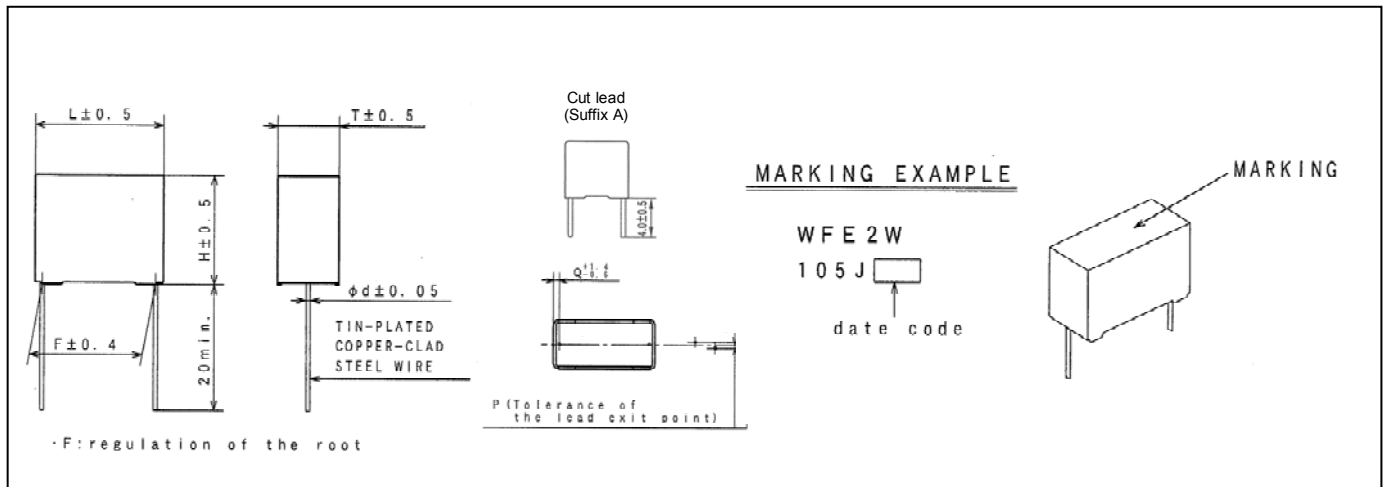
■ Specifications

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	1.0 uF , 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)



■Rating, Dimension & Quantity / Ammo Box

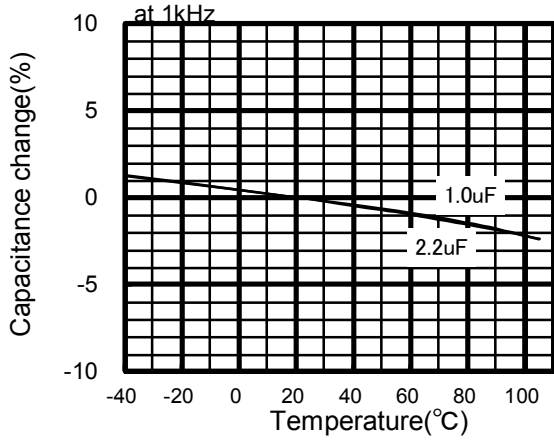
Part No.	Capacitance (μF)	Dimensions (mm)							Min. Order Q't	
		L	T	H	F	φd	P	Q	Straight	Cut lead
ECWFE2W105□()	1.0	17.5	7.0	12.5	15.0	0.8	0±0.8	1.25	1000	1000
ECWFE2W225□()	2.2	17.5	10.0	15.5	15.0	0.8	0±0.8	1.25		600

↑ Suffix for lead crimped
 ↑ Capacitance tolerance code

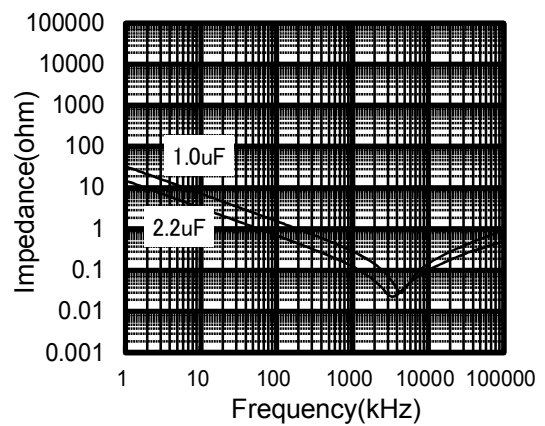
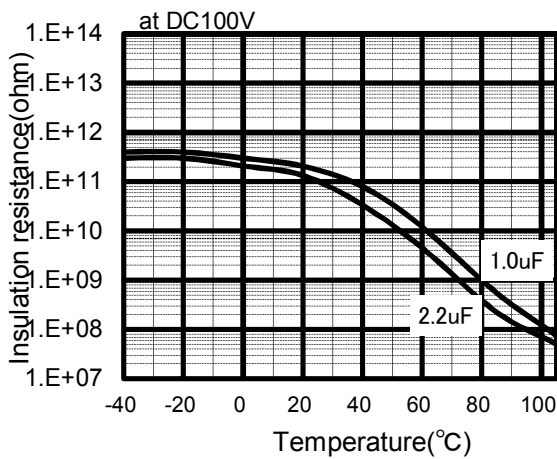
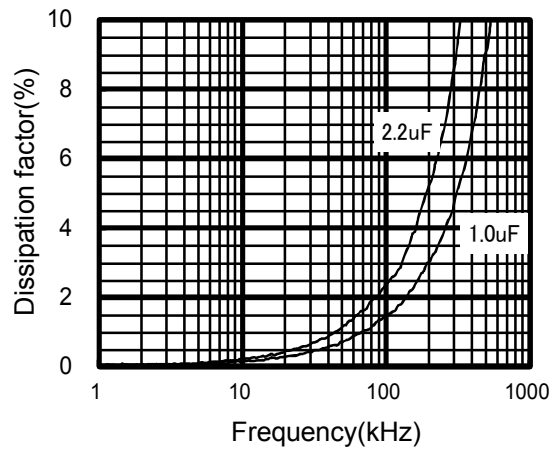
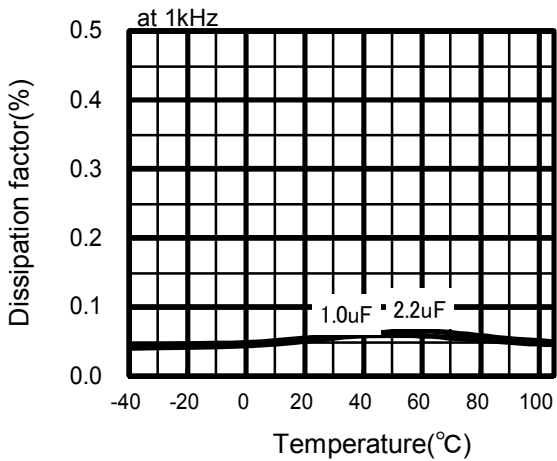
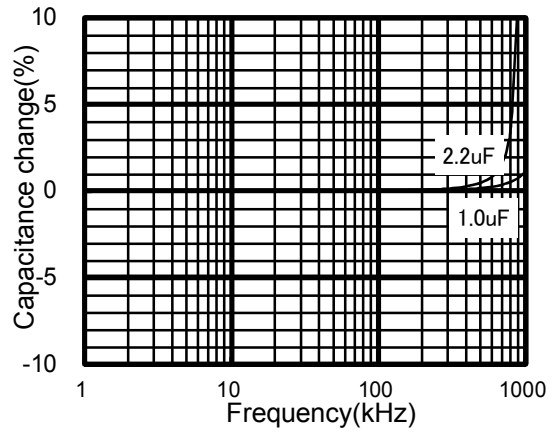
ECWFE Type DC450V series (Metallized Polypropylene Film)

Electrical Characteristics <Typical Data >

Temperature Characteristics



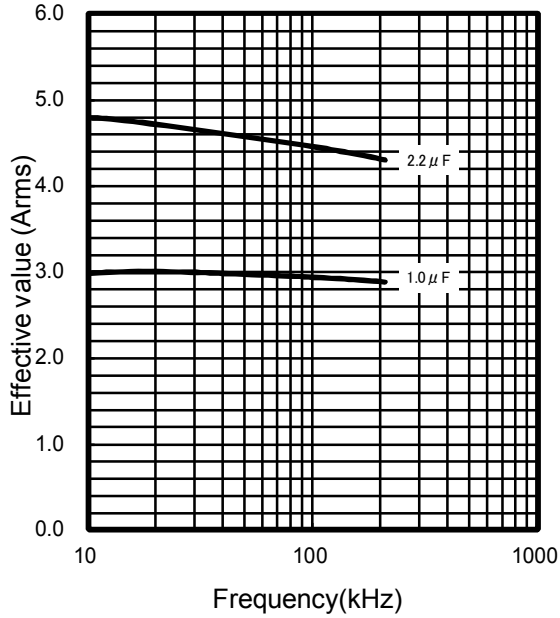
Frequency Characteristics



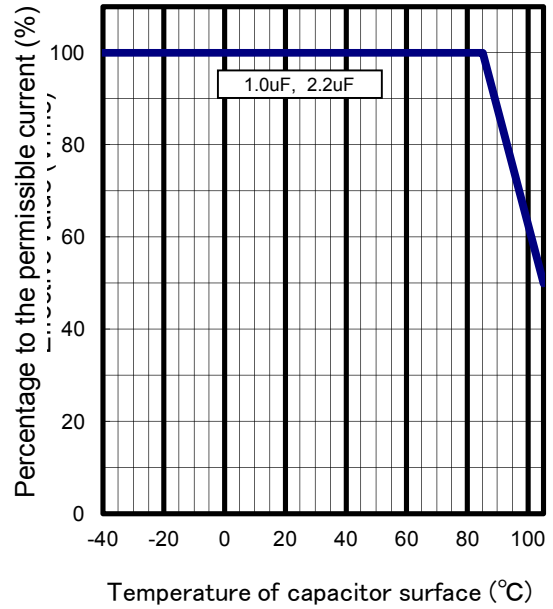
ECWFE Type DC450V series (Metallized Polypropylene Film)

Applicable Specifications

Permissible Current



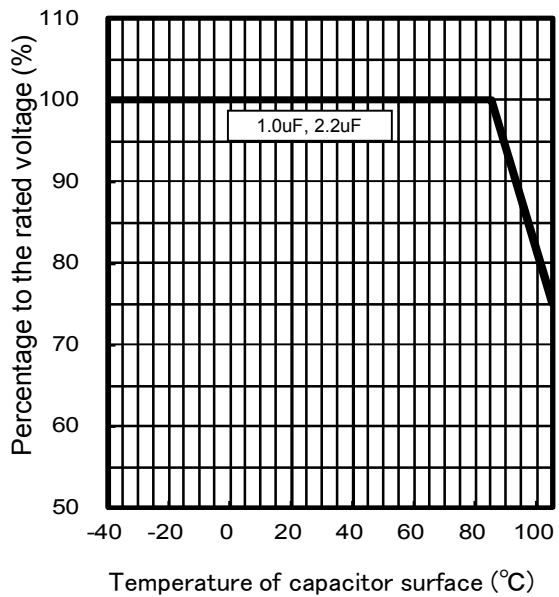
Permissible Current Derating by Temperature



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

Rated Voltage	Capacitance (µF)	Code	dV/dt (V/µs)	Current (A0-P)
DC 450V	1.00	105	24.3	24.3
	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.