

2024.11

# **Metallized PP Film Capacitor**

# High safety, long life, low loss and low ESR, Capable of high current

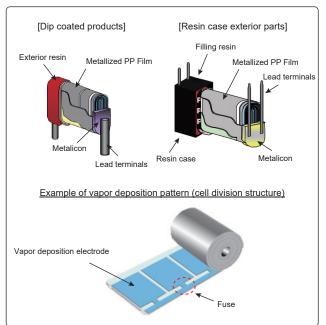
### **Product summary**

- •Polypyroprene (PP) film with excellent physical properties is used as a dielectric, and we have a wide range of products in a wide range of voltage and capacitance ranges.
- •The electrodes are equipped with a safety mechanism based on our proprietary vapor deposition technology, and we pursue miniaturization by making the film thinner while ensuring high safety.
- •Automotive products are characterized by high current, high reliability, and high safety, and are AEC-Q200 compliant, contributing to automotive applications that require high output and high reliability.

#### **Features**

- PP film is used as the dielectric, and low ESR and strong current are achieved through our unique vapor deposition technology
  - · We provide products that are ideal for various applications such as input/output filters, DC links, PFC, and resonance.
- High safety and long life due to safety mechanism (fuse)
  - Our unique vapor deposition pattern technology makes the life end fail-safe (open mode by isolating the insulation defect part). In addition, this safety function maintains the function of the capacitor and extends its life.
- High humidity resistance 85°C, 85% guarantee
  - We are expanding the range of products with a guarantee of 85°C and 85% RH in response to the requirements for moisture resistance.

#### **Structure**

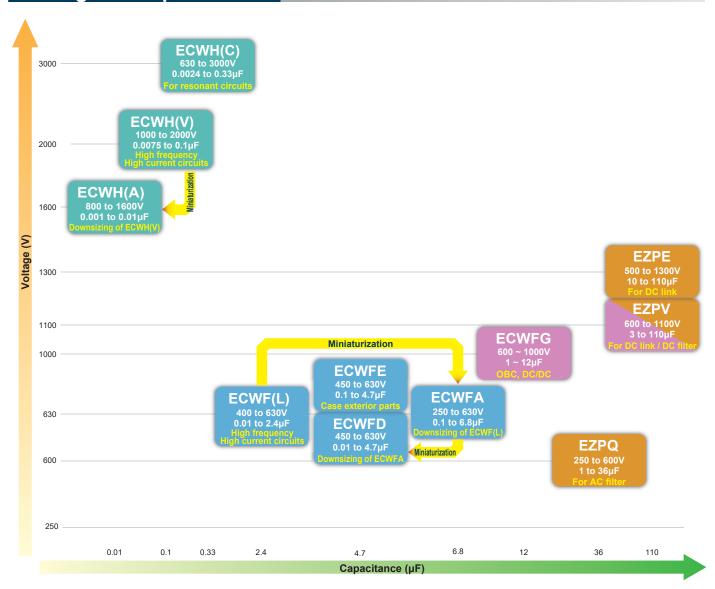


#### **Applications**



Isuue: Panasonic Industry Co., Ltd. Device Solutions Business Division 1006 Kadoma, Kadoma City, Osaka, 571-8506 Japan

## **Voltage vs Capacitance**



### Characteristic

	General products								
Series	ECWF(L)	ECWF(A)	ECWFD	ECWFE	ECWH(V)	ECWH(A)	ECWH(C)		
Rated voltage (V)	400, 630	250 to 630	450, 630	450, 630	1000 to 2000	800, 1600	630 to 3000		
Capacitance (µF)	0.01 to 2.4	0.1 to 6.8	0.01 to 4.7	0.1 to 4.7	0.001 to 0.1	0.001 to 0.047	0.0024 to 0.33		
Category temperature range (℃)	-40 to +105	-40 to +105	-40 to +105 -40 to +110	-40 to +105	-40 to +105	-40 to +105	-40 to +85 -40 to +105		

	For automot	ive (AEC-Q200)	For industrial infrastructure			
Series	ECWFG	EZPV	EZPV	EZPE	EZPQ	
Rated voltage (V)	600 to 1100	600 to 1100	600 to 1100	500 to 1300	250 to 600 (AC)	
Capacitance (µF)	1 to 12	3 to 110	3 to 110	10 to 110	1 to 36	
Category temperature range (°C)	-40 to +110 -40 to +125	-40 to +105	-40 to +105	-40 to +85	-40 to +85 -40 to +105	
Permissible current(Arms) [at 10 kHz]	3.3 to 10.1 [at 85 ℃*1]	4.4 to 29.3 [at 70 ℃]	4.4 to 29.3 [at 70 ℃]	5 to 18.5 [at 70 ℃]	2.1 to 17.9 [at 85 ℃]	
ESR (mΩ) [at 20 ℃/10 kHz]	4.2 to 36.5	3.6 to 30.8	3.6 to 30.8	4.4 to 22	3.9 to 71.6	

\*1 Rated voltage :600V, 1100V at 70℃

#### Web site

Film Capacitors (Electronic Equipment Use)



Film Capacitors (Automotive, Industrial and Infrastructure Use)

