Electronic Equipment Use

Dielectric		Series	Appearance	Operating Temp✻	Rating	Structure・Feature	Application
Stacked Metallized Film Chip Capacitor	Stacked Metallized PPS Film Chip Capacitor	ECHU(X)		−55 ℃ to +125 ℃	0.00010 μF to 0.22 μF 16 V.DC, 50 V.DC	● Non-inductive, Stacked ● Tight C-Tol. ● Reflow soldering	● High density mounting
		ECHU(C)		−55 ℃ to +105 ℃	0.010 μF to 0.22 μF 100 V.DC	● Non-inductive, Stacked ● Tight C-Tol. ● Reflow soldering	● High density mounting ● Resonance circuit for LCD B/L inverter unit
	Stacked Metallized PEN Film Chip Capacitor	ECWU(X)		−55 ℃ to +105 ℃	0.0010 μF to 0.010 μF 100 V.DC	● Non-inductive ● Reflow soldering	● High density mounting
		ECWU(C)		−55 ℃ to +125 ℃	0.0010 μF to 1.0 μF 100 V.DC to 630 V.DC	● Non-inductive ● Reflow soldering	● Ringer circuit telephone PBX ● DC Blocking for xDSL
		ECWU(V16)		−55 ℃ to +85 ℃	0.0010 μF to 0.12 μF 250 V.DC	● Non-inductive ● Reflow soldering	● Ringer circuit telephone PBX ● DC Blocking for xDSL
	Stacked Metallized Plastic Film Chip Capacitor	ECPU(A)		−40 ℃ to +85 ℃	0.10 μF to 1.0 μF 16 V.DC	● Non-inductive ● Reflow soldering	● Noise suppressor ● Audio circuit
Metallized Type	Metallized Polyester Film Capacitor	ECQE(F)		−40 ℃ to +105 ℃	0.0010 μF to 10 μF 100 V.DC to 1250 V.DC, 125 V.AC, 250 V.AC	● Epoxy resin coating ● Wide capacitance range	● General purpose ● Noise suppressor
		ECQE(B)		−40 ℃ to +105 ℃	0.010 μF to 4.7 μF 250 V.DC 125 V.AC	● Epoxy resin coating ● Miniaturization of ECQE(F) type	● General purpose ● Noise suppressor
		ECQE(T)		−40 ℃ to +105 ℃	0.010 μF to 10 μF 250 V.DC to 630 V.DC 125 V.AC, 250 V.AC	● Epoxy resin coating ● Excellent moisture resistance	● Electric circuit of high humidity equipment
	Metallized Polypropylene Film Capacitor	ECWF(L)		−40 ℃ to +105 ℃	0.010 μF to 2.4 μF 400 V.DC, 630 V.DC	● Epoxy resin coating ● Low D.F ● Excellent moisture resistance	● High frequncy high current circuit
		ECWF(A)		−40 ℃ to +105 ℃	0.10 μF to 6.8 μF 250 V.DC to 630 V.DC	● Miniaturization of ECWF(L) type ● Low D.F	● Active filtering circuit ● High frequency high current circuit
		ECWFD		−40 ℃ to +110 ℃ −40 ℃ to +105 ℃	0.1 μF to 4.7 μF 450 V.DC 0.047 μF to 4.7 μF 630 V.DC	● Epoxy resin coating ● Low D.F ● Miniaturization of ECWF(A) type	● Active fi ltering circuit ● High frequency high current circuit
		ECWFE		−40 ℃ to +105 ℃	0.10 μF to 4.7 μF 450 V.DC, 630 V.DC	● Box type ● Low D.F	● Active fi ltering circuit ● High frequency high current circuit
		ECWH(V)		−40 ℃ to +105 ℃	0.0010 μF to 0.10 μF 1000 V.DC to 2000 V.DC	● Epoxy resin coating ● Low D.F ● Small in size	● High frequency high current circuit
		ECWH(A)		−40 ℃ to +105 ℃	0.0010 μF to 0.047 μF 800 V.DC, 1600 V.DC	● Epoxy resin coating ● Low D.F ● Miniaturization of ECWH(V) type	● General resonance circuit
		ECWH(C)		−40 ℃ to +105 ℃ (+85 ℃)	0.0024 μF to 0.33 μF 630 V.DC to 3000 V.DC	● Epoxy resin coating ● Low D.F	● General resonance circuit ● Microwave oven ● IH resonance circuit
		TMF		−25 ℃ to +85 ℃	(Smoothing circuit) 1 μF to 10 μF 150 V.AC to 220 V.AC 350 V.DC to 630 V.DC (Resonance circuit) 0.01 μF to 4.0 μF 300 V.AC to 2300 V.AC 500 V.DC to 1200 V.DC	● Wide voltage range up to 2300 V.AC ● High frequency and high current capability ● Low loss/Low ESR ● Long life time / High reliability ● Flame retardant	● General resonance and smoothing circuits for IH and Industry
Interference Suppressors (Safety standard approval capacitors)	Metallized Polypropylene Film Capacitor	ECQUA		−40 ℃ to +110 ℃	0.10 μF to 4.7 μF 275 V.AC	● Box type ● UL, CSA, VDE Approved (ClassX2)	Worldwide ● Noise suppressor for AC line
	Metallized Polyester Film Capacitor	ECQUL		−40 ℃ to +100 ℃	0.0010 μF to 2.2 μF 275 V.AC(250 V.AC)	● Box type ● UL, CSA, VDE Approved (ClassX2/Y2)	Worldwide ● Noise suppressor for AC line
		ECQUG		−40 ℃ to +100 ℃	0.010 μF to 1.0 μF 300 V.AC(250 V.AC)	● Equipped with a safety mechanism ● UL, CSA, VDE, ENEC Approved (ClassX1)	Worldwide ● Noise suppressor for AC line

✻ Operating temp. : Including temperature-rise on unit surface.

✻ Refer to each product page for details.

Panasonic

Summary of Products

AC Motor Use

Dielectric	Series	Appearance	Operating Temp✻	Rating	Structure・Feature	Application
Film Capacitor for AC Motor	AMF		−25 ℃ to +70 ℃	10 μF to 40 μF 180 V.AC to 440 V.AC	● High safety (with safety function) ● High reliability ● Small size, lightness, and low loss	● Motor and compressor (for running)
	DMF		−25 ℃ to +70 ℃	10 μF to 60 μF 180 V.AC to 450 V.AC	● High safety (with safety device) ● High reliability, safety standard approval ● Small size, lightness, and low loss	● Motor and compressor (for running)
	PMF/SMF		−25 ℃ to +70 ℃	0.5 μF to 65 μF 150 V.AC to 500 V.AC	● High safety (with safety function) ● High reliability, safety standard approval ● Small size, lightness, and low loss	● Motor and small compressor (for running)

Automotive, Industrial and Infrastructure Use

Dielectric	Series	Appearance	Operating Temp✻	Rating	Structure・Feature	Application
Metallized Polyester Film Capacitor for Noise Suppression of Automobile	ECQE		−40 ℃ to +130 ℃	0.47 μF, 2.2 μF, 4.7 μF 250 V.DC	● Box type	● Noise suppressor for automobile
New Metallized Polypropylene Film Capacitors	ECWFG		-40 ℃ to +110 ℃	1.0 μF to 4.7 μF 630 V.DC	● AEC-Q200 compliant ● High safety (with safety function) ● Excellent moisture resistance ● High thermal shock resistance	● xEV charging circuit ● DC/DC, AC/DC converter (smoothing, PFC)
New Metallized Polypropylene Film Capacitors	ECQUA		-40 ℃ to +110 ℃	0.1 μF to 4.7 μF 275 V.AC	● AEC-Q200 compliant ● High safety (with safety function) ● Excellent moisture resistance ● High thermal shock resistance	● xEV charging circuit ● AC/DC converter (Noise suppression)
DC-Link Film Capacitor	Type1		−40 ℃ to +105 ℃	581 μF 450 V.DC	● High safety, Self-healing and Self-protecting function built in. ● No catastrophic failure upon natural end of life due to inbuilt fuse function.	● Any automotive and /or other application requiring DC Linkage
Metallized Polypropylene Film Capacitors	EZPE		−40 ℃ to +85 ℃	10 μF to 110 μF 500 V.DC to 1300 V.DC	● High safety (with safety function) ● Long product life, High reliability ● Low loss, Low ESR ● Flame retardant	● DC filtening ● DC link circuit
	EZPE (Low profile type)		−40 ℃ to +85 ℃	29 μF : 450 V.DC 66 μF : 525 V.DC 12 μF : 575 V.DC 10 μF : 630 V.DC	● High safety (with safety function) ● Long product life, High reliability, High moisture resistance ● Low loss, Low ESR ● Flame retardant	● Solar inverters, Micro inverters ● Wind power generation ● Industrial power supplies ● Inverter circuit in appliances (Air Conditioners etc.)
	EZPQ		−40 ℃ to +85 ℃	12 μF to 36 μF 250 V.AC	● High safety (with safety function) ● Long product life, High reliability ● Low loss, Low ESR ● Flame retardant ● Super high moisture resistance (85 °C, 85 %RH)	●AC Filter

✻ Operating temp. : Including temperature-rise on unit surface.

✻ Refer to each product page for details.