




















Summary of Products

● 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 °C to +125 °C	0.00010 μF to 0.22 μF [DC] 16 V, 50 V	<ul style="list-style-type: none"> <li>● Non-inductive, Stacked</li> <li>● Tight C-Tol.</li> <li>● Reflow soldering</li> </ul>	● High density mounting
		ECHU(C)		-55 °C to +105 °C	0.010 μF to 0.22 μF [DC] 100 V	<ul style="list-style-type: none"> <li>● Non-inductive, Stacked</li> <li>● Tight C-Tol.</li> <li>● Reflow soldering</li> </ul>	<ul style="list-style-type: none"> <li>● High density mounting</li> <li>● Resonance circuit for LCD B/L inverter unit</li> </ul>
	Stacked metallized PEN film chip capacitor	ECWU(X)		-55 °C to +105 °C	0.0010 μF to 0.010 μF [DC] 100 V	<ul style="list-style-type: none"> <li>● Non-inductive</li> <li>● Reflow soldering</li> </ul>	● High density mounting
		ECWU(C)		-55 °C to +125 °C	0.0010 μF to 1.0 μF [DC] 100 V to 630 V	<ul style="list-style-type: none"> <li>● Non-inductive</li> <li>● Reflow soldering</li> </ul>	<ul style="list-style-type: none"> <li>● Ringer circuit telephone PBX</li> <li>● DC Blocking for xDSL</li> </ul>
	ECWU(V16)		-55 °C to +85 °C	0.0010 μF to 0.12 μF [DC] 250 V	<ul style="list-style-type: none"> <li>● Non-inductive</li> <li>● Reflow soldering</li> </ul>	<ul style="list-style-type: none"> <li>● Ringer circuit telephone PBX</li> <li>● DC Blocking for xDSL</li> </ul>	
Stacked metallized Plastic film chip capacitor	ECPU(A)		-40 °C to +85 °C	0.10 μF to 1.0 μF [DC] 16 V	<ul style="list-style-type: none"> <li>● Non-inductive</li> <li>● Reflow soldering</li> </ul>	<ul style="list-style-type: none"> <li>● Noise suppressor</li> <li>● Audio circuit</li> </ul>	
Metallized type	Metallized polyester film capacitor	ECQE(F)		-40 °C to +105 °C	0.0010 μF to 10 μF [DC] 100 V to 1250 V [AC] 125 V, 250 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Wide capacitance range</li> </ul>	<ul style="list-style-type: none"> <li>● General purpose</li> <li>● Noise suppressor</li> </ul>
		ECQE(B)		-40 °C to +105 °C	0.010 μF to 4.7 μF [DC] 250 V [AC] 125 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Miniaturization of ECQE(F) type</li> </ul>	<ul style="list-style-type: none"> <li>● General purpose</li> <li>● Noise suppressor</li> </ul>
		ECQE(T)		-40 °C to +105 °C	0.010 μF to 10 μF [DC] 250 V to 630 V [AC] 125 V, 250 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Excellent moisture resistance</li> </ul>	● Electric circuit of high humidity equipment
	Metallized polypropylene film capacitor	ECWF(L)		-40 °C to +105 °C	0.010 μF to 2.4 μF [DC] 400 V, 630 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Low D.F</li> <li>● Excellent moisture resistance</li> </ul>	● High frequency high current circuit
		ECWF(A)		-40 °C to +105 °C	0.10 μF to 6.8 μF [DC] 250 V to 630 V	<ul style="list-style-type: none"> <li>● Miniaturization of ECWF(L) type</li> <li>● Low D.F</li> </ul>	<ul style="list-style-type: none"> <li>● Active filtering circuit</li> <li>● High frequency high current circuit</li> </ul>
		ECWFD		-40 °C to +110 °C	0.1 μF to 4.7 μF [DC] 450 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Low D.F</li> <li>● Miniaturization of ECWF(A) type</li> </ul>	<ul style="list-style-type: none"> <li>● Active filtering circuit</li> <li>● High frequency high current circuit</li> </ul>
				-40 °C to +105 °C	0.01 μF to 4.7 μF [DC] 630 V		
		ECWFE		-40 °C to +105 °C	0.10 μF to 4.7 μF [DC] 450 V, 630 V	<ul style="list-style-type: none"> <li>● Box type</li> <li>● Low D.F</li> </ul>	<ul style="list-style-type: none"> <li>● Active filtering circuit</li> <li>● High frequency high current circuit</li> </ul>
		ECWH(V)		-40 °C to +105 °C	0.0010 μF to 0.10 μF [DC] 1000 V to 2000 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Low D.F</li> <li>● Small in size</li> </ul>	● High frequency high current circuit
		ECWH(A)		-40 °C to +105 °C	0.0010 μF to 0.047 μF [DC] 800 V, 1600 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Low D.F</li> <li>● Miniaturization of ECWH(V) type</li> </ul>	● General resonance circuit
	ECWH(C)		-40 °C to +105 °C (+85 °C)	0.0024 μF to 0.33 μF [DC] 630 V to 3000 V	<ul style="list-style-type: none"> <li>● Epoxy resin coating</li> <li>● Low D.F</li> </ul>	<ul style="list-style-type: none"> <li>● General resonance circuit</li> <li>● Microwave oven</li> <li>● IH resonance circuit</li> </ul>	
	TMF		-25 °C to +85 °C	(Smoothing circuit) 1 μF to 10 μF [AC] 150 V to 220 V [DC] 350 V to 630 V (Resonance circuit) 0.01 μF to 4.0 μF [AC] 300 V to 2300 V [DC] 500 V to 1200 V	<ul style="list-style-type: none"> <li>● Wide voltage range up to 2300 V[AC]</li> <li>● High frequency and high current capability</li> <li>● Low loss/Low ESR</li> <li>● Long life time / High reliability</li> <li>● Flame retardant</li> </ul>	● General resonance and smoothing circuits for IH and Industry	
	Interference suppressors (Safety standard approval capacitors)	Metallized polypropylene film capacitor	ECQUA		-40 °C to +110 °C	0.0082 μF to 10.0 μF [AC] 275 V	<ul style="list-style-type: none"> <li>● Box type</li> <li>● UL, CSA, ENEC Approved (Class X2)</li> </ul>
ECQUB				0.001 μF to 1.0 μF [AC] 300 V		<ul style="list-style-type: none"> <li>● Box type</li> <li>● UL, CSA, ENEC Approved (Class Y2/X1)(Class X1)</li> </ul>	

\* Operating temp. : Including temperature-rise on unit surface.

\* Refer to each product page for details.









**Summary of Products**

● **AC Motor Use**

Dielectric	Series	Appearance	Operating temp. *	Rating	Structure・Feature	Application
Film capacitor for AC motor	AMF		-25 °C to +70 °C	10 μF to 40 μF [AC] 180 V to 440 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● High reliability</li> <li>● Small size, lightness, and low loss</li> </ul>	● Motor and compressor (for running)
	★DMF		-25 °C to +70 °C	10 μF to 60 μF [AC] 180 V to 450 V	<ul style="list-style-type: none"> <li>● High safety (with safety device)</li> <li>● High reliability, safety standard approval</li> <li>● Small size, lightness, and low loss</li> </ul>	● Motor and compressor (for running)
	PMF		-25 °C to +70 °C	0.5 μF to 65 μF [AC] 150 V to 500 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● High reliability, safety standard approval</li> <li>● Small size, lightness, and low loss</li> </ul>	● Motor and small compressor (for running)
	★SMF		-25 °C to +70 °C	1.5 μF to 9 μF [AC] 370 V to 450 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● High reliability, safety standard approval</li> <li>● Small size, lightness, and low loss</li> </ul>	● Motor and small compressor (for running)

★ Not Recommended for New Design

● **Automotive, Industrial and Infrastructure Use**

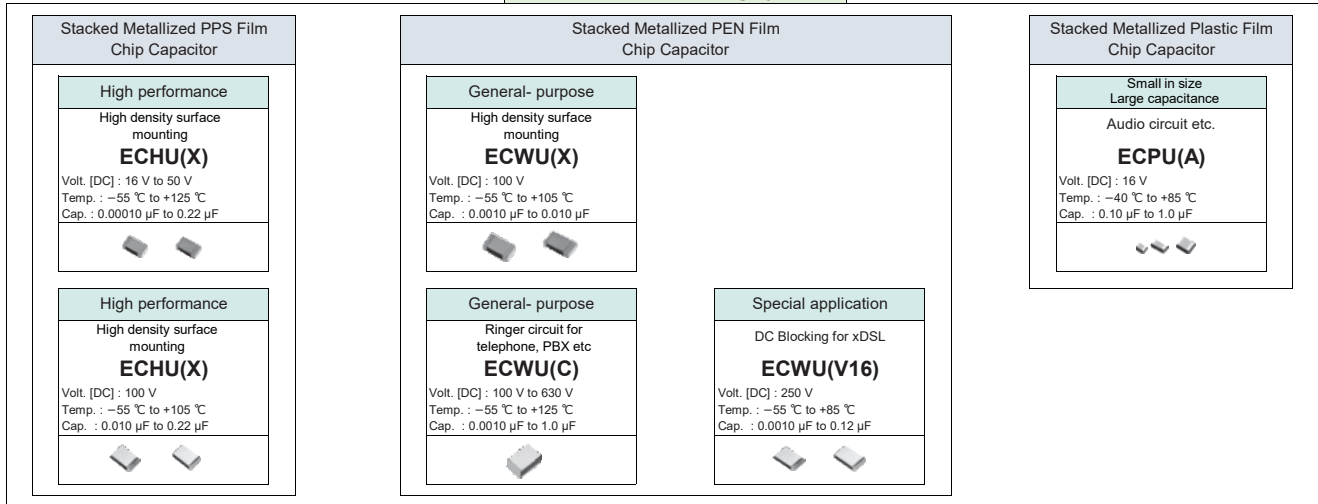
Dielectric	Series	Appearance	Operating temp. *	Rating	Structure・Feature	Application
Metallized polyester Film capacitor for noise suppression of automobile	ECQE		-40 °C to +130 °C	0.47 μF, 2.2 μF, 4.7 μF [DC] 250 V	● Box type	● Noise suppressor for automobile
Metallized polypropylene film capacitors	ECWFG		-40 °C to +110 °C	1.0 μF to 12.0 μF [DC] 600 V to 1100 V	<ul style="list-style-type: none"> <li>● AEC-Q200 compliant</li> <li>● High safety (with safety function)</li> <li>● Excellent moisture resistance</li> <li>● High thermal shock resistance</li> </ul>	<ul style="list-style-type: none"> <li>● xEV charging circuit</li> <li>● DC/DC, AC/DC converter (smoothing, PFC)</li> </ul>
Metallized polypropylene film capacitors	ECQUA		-40 °C to +110 °C	0.1 μF to 10.0 μF [AC] 275 V, 310 V	<ul style="list-style-type: none"> <li>● AEC-Q200 compliant</li> <li>● High safety (with safety function)</li> <li>● Excellent moisture resistance</li> <li>● High thermal shock resistance</li> </ul>	<ul style="list-style-type: none"> <li>● xEV charging circuit</li> <li>● AC/DC converter (Noise suppression)</li> </ul>
DC-Link film capacitor	Type1		-40 °C to +105 °C	581 μF [DC] 450 V	<ul style="list-style-type: none"> <li>● High safety, Self-healing and Self-protecting function built in.</li> <li>● No catastrophic failure upon natural end of life due to inbuilt fuse function.</li> </ul>	● Any automotive and /or other application requiring DC Linkage
Metallized polypropylene film capacitors	EZPE		-40 °C to +85 °C	10 μF to 110 μF [DC] 500 V to 1300 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● Long product life, High reliability</li> <li>● Low loss, Low ESR</li> <li>● Flame retardant</li> </ul>	<ul style="list-style-type: none"> <li>● DC filtering</li> <li>● DC link circuit</li> </ul>
	EZPE (Low profile type)		-40 °C to +85 °C	29 μF : [DC] 450 V 66 μF : [DC] 525 V 12 μF : [DC] 575 V 10 μF : [DC] 630 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● Long product life, High reliability, High moisture resistance</li> <li>● Low loss, Low ESR</li> <li>● Flame retardant</li> </ul>	<ul style="list-style-type: none"> <li>● Solar inverters, Micro inverters</li> <li>● Wind power generation</li> <li>● Industrial power supplies</li> <li>● Inverter circuit in appliances (Air Conditioners etc.)</li> </ul>
	EZPQ		-40 °C to +85 °C	12 μF to 36 μF [AC] 250 V	<ul style="list-style-type: none"> <li>● High safety (with safety function)</li> <li>● Long product life, High reliability</li> <li>● Low loss, Low ESR</li> <li>● Flame retardant</li> <li>● High moisture resistance</li> </ul>	<ul style="list-style-type: none"> <li>● AC Filter</li> <li>● Solar inverters</li> <li>● UPS</li> <li>● Industrial power supplies</li> <li>● Inverter circuit in appliances</li> </ul>
			-40 °C to +105 °C	1 μF to 35 μF [AC] 330 V, 380 V, 600 V		
EZPV		-40 °C to +105 °C	3 μF to 110 μF [DC] 600 V to 1100 V	<ul style="list-style-type: none"> <li>● High Safety (with safety function)</li> <li>● Long product life, High reliability</li> <li>● Low loss, Low ESR</li> <li>● Flame retardant (Case and sealing resin)</li> <li>● AEC-Q200 compliant (For automotive Part No.)</li> </ul>	<ul style="list-style-type: none"> <li>● For DC filtering</li> <li>● DC link circuit</li> <li>● Solar inverters</li> <li>● Wind power generation</li> <li>● Industrial power supplies</li> <li>● Inverter circuit in appliances</li> <li>● On board charger</li> </ul>	

\* Operating temp. : Including temperature-rise on unit surface.

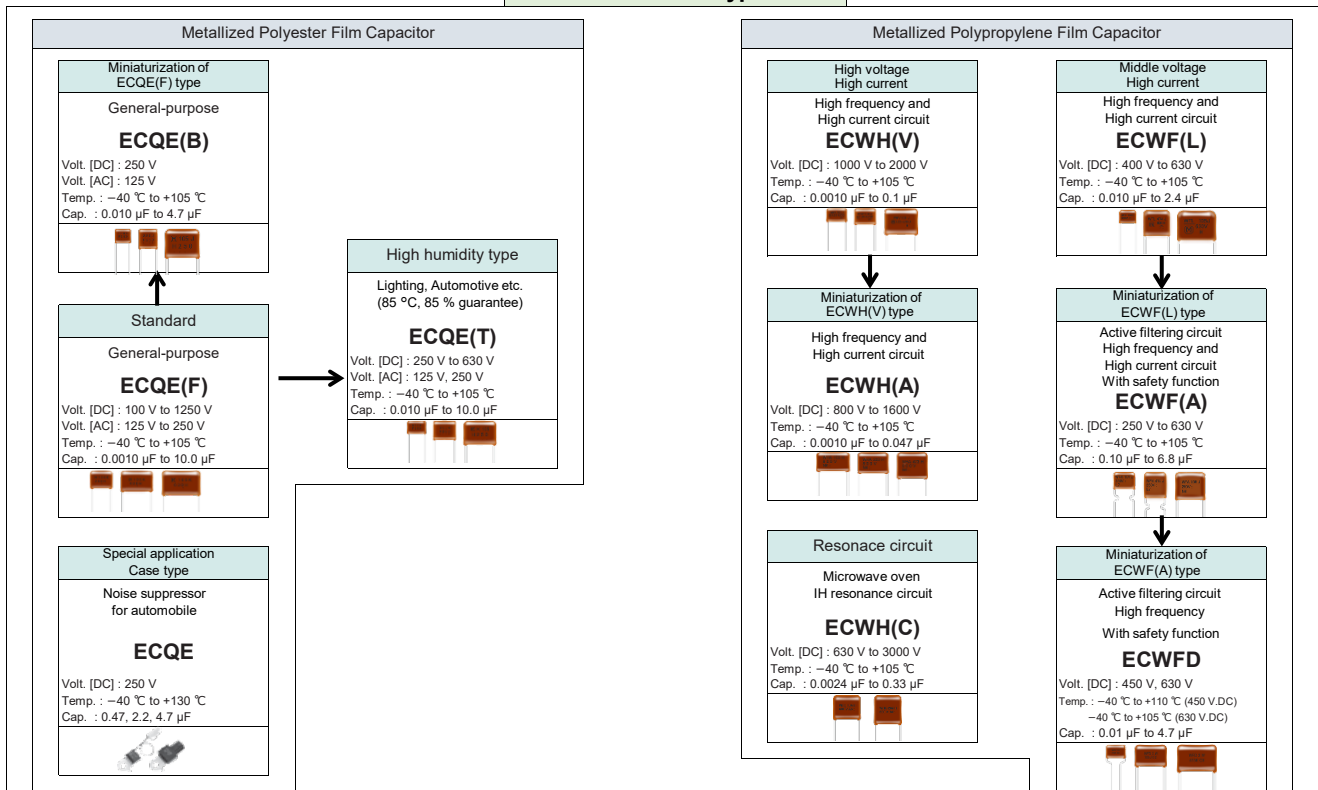
\* Refer to each product page for details.

Series system diagram

Surface mounting type



Radial lead type



Safety Standard Approval Metallized Film Capacitor

