

LYTIC CAPACITORS

ALUMINUM ELECTROLYTIC									
SURFACE MOUNT TYPE*									
General Purpose									
Long Life									
125°C									
Low ESR Long Life									
Bi-Polar									
General Purpose									
Miniature									
Bi-Polar									
Long Life									
Low Impedance									
125°C									
Series	Part Number	Appearance	Operating Temperature	(Working Voltage) Capacitance	Features				
VS	ECE-VxxS/Axxx EEE-xA/Sxxxxx		-40 ~ +85°C	(4 ~ 100 VDC) 0.1 ~ 1,500 μF	• General purpose, 2,000 hrs. @ 85°C • Very compact size				
HA	EEV-HAxxxxx EEE-HAxxxxx		-40 ~ +105°C	(6.3 ~ 100 Vdc) 0.1 ~ 1,500 μF	• Long life, 1000 to 2,000 hrs. @ 105°C • Very compact size				
HB	EEV-HBxxxxx EEE-HBxxxxx			(4 ~ 50 VDC) 0.1 ~ 470 μF	• Long life, 2,000 hrs. @ 105°C • 6.0 mm height				
HC	EEE-HCxxxxx			(6.3 ~ 50 Vdc) 0.1 ~ 1,000 μF	• Long life, 3,000 hrs. @ 105°C • 5.8 mm height				
HD	EEV-HDxxxxxx			(10 ~ 100 Vdc) 0.47 ~ 330 μF	• Very long life, 5,000 hrs. @ 105°C • Industrial grade				
EB	EEV-EBxxxxx		-25 ~ +105°C	(160 ~ 450 Vdc) 2.2 ~ 100 μF	• Low impedance, 3,000 to 5,000 hrs. @ 105°C • Large can, 10 ~ 18 mm (Dia.)				
TA	EEV-TAxxxxx		-40 ~ +125°C	(10 ~ 50 Vdc) 10 ~ 330 μF	• High temperature, 1,000 hrs. @ 125°C • Automotive applications				
TG	EEV-TGxxxxx EEE-TGxxxxx			(10 ~ 100 Vdc) 10 ~ 4,700 μF	• High temperature, 2,000 hrs. @ 125°C • Compact Size				
TK	EEV-TKxxxxx EEE-TKxxxxx			(10 ~ 35 Vdc) 47 ~ 470 μF	• High temperature, 3,000 hrs. @ 125°C • Low ESR				
FK	EEV-FKxxxxx EEE-FKxxxxx		-55 ~ +105°C	(6.3 ~ 100 Vdc) 3.3 ~ 6,800 μF	• Long life, 2,000 to 5,000 hrs. @ 105°C • Low ESR, Tantalum replacement • Compact & wide size range, 4 ~ 18 mm (Dia.)				
FC	EEV-FCxxxxx EEE-FCxxxxx		-40 ~ +105°C	(6.3 ~ 50 Vdc) 1 ~ 1,500 μF	• 1,000 hrs. @ 105°C • Low impedance				
VS-BP	ECE-VxxAxxxN EEE-VxxAxxxN		-40 ~ +85°C	(6.3 ~ 50 Vdc) 0.22 ~ 47 μF	• General Purpose • 5.5mm max. in height				
HB-BP	EEV-HPxxxxx EEE-HPxxxxx		-40 ~ +105°C		• Industrial Grade • 6.1mm max. in height				
M	ECA-xxMxxx		-40 ~ +85°C (-25°C: 160~450VDC)	(6.3 ~ 450 Vdc) 0.1 ~ 22,000 μF	• General purpose, 2000 hrs. @ 85°C • Compact size				
KA	ECE-AxxKAxxx		-40 ~ +85°C	(4 ~ 50 Vdc) 0.1 ~ 470 μF	• General purpose, 1,000 hrs. @ 85°C • 7 mm height				
KS	ECE-AxxKK/KSxxx			(4 ~ 50 Vdc) 0.1 ~ 330 μF	• General purpose, 1000 hrs. @ 85°C • 5 mm height				
BP-SU	ECE-AxxNxxxU/X		-40 ~ +85°C	(6.3 ~ 50 Vdc) 0.47 ~ 6,800 μF	• 2,000 hrs. @ 85°C • Bi-Polar general purpose				
NHG	ECA-xxHGxxx		-55 ~ +105°C (-25°C: 160~450VDC)	(6.3 ~ 450 Vdc) 0.1 ~ 22,000 μF	• Long life, 1,000 to 2,000 hrs. @ 105°C • Compact size				
EB	EEU-EBxxxxx		-40 ~ +105°C (-25°C: 160~450VDC)	(10 ~ 450 Vdc) 0.47 ~ 3,300 μF	• 5,000 to 10,000 hrs. @ 105°C • Very long life				
ED	EEU-EDxxxxx		-25 ~ +105°C	(160 ~ 450 Vdc) 10 ~ 3,30 μF	• Very long life 8,000 to 10,000 hrs. @ 105°C • High Ripple Current				
FC	EEA/U-FCxxxxx		-55 ~ +105°C	(6.3 ~ 100 Vdc) 1.0 ~ 15,000 μF	• 1,000 to 5,000 hrs. @ 105°C • Low impedance, miniature				
FM	EEU-FMxxxxx		-40 ~ +105°C	(6.3 ~ 50 Vdc) 22 ~ 6,800 μF	• Long life, 2,000 to 7,000 hrs. @ 105°C • Low ESR, approximately half of FC				
TA	EEU-TAxxxxx		-40 ~ +125°C	(10 ~ 63 Vdc) 1 ~ 4,700 μF	• 2,000 hrs. @ 125°C • Automotive applications				

*NOTE: Surface Mount Type RoHS Compliant Part Number Prefix:

EEE (Diameter: 3~10mm)

EEV (Diameter: 12.5~18mm)

				Series	Part Number	Appearance	Operating Temperature	(Working Voltage) Capacitance	Features
SPECIALTY POLYMER	SURFACE MOUNT TYPE		General Purpose	FD	EEF-FDxxxxxx		-40 ~ +105°C	(2 ~ 12.5 Vdc) 15 ~ 68 μF	• Low ESR, high ripple current • 1.1 mm height, ESR 28 mΩ minimum
				CD	EEF-CDxxxxxx			(2 ~ 16Vdc) 2.2 ~ 150 μF	• Low ESR, high ripple current • 1.8 mm height, ESR 15 mΩ minimum
				CX	EEF-CXxxxxxx			(2 ~ 6.3 Vdc) 100 ~ 220 μF	• Low ESR, high ripple current • 1.9 mm height, ESR 15 mΩ minimum
				UD	EEF-UDxxxxxx			(2 ~ 8 Vdc) 68 ~ 330 μF	• Low ESR, high ripple current • 2.8 mm height, ESR 12 mΩ minimum
				UE	EEF-UExxxxxx			(2 ~ 8 Vdc) 100 ~ 560 μF	• Low ESR, high ripple current • 4.2 mm height, ESR 10 mΩ minimum
			Lower ESR	S	EEF-Sxxxxxx		(2 ~ 6.3 VDC) 56 ~ 560 μF	• Lower ESR, higher ripple current • 1.8/2.0/2.8/4.2 mm height, ESR 5 to 9 mΩ max	
			125°C	H	EEF-Hxxxxxx		-40 ~ +125°C	(2 ~ 8 Vdc) 33 ~ 330 μF	• High reliability • Low ESR, high ripple current
ELECTRIC DOUBLE LAYER	SMT	EN	EEC-ENxxxxx		-10 ~ +60°C	(3.3 Vdc) 0.2 F	• SMT Re-flow solderable • Coin type, low profile		
	RADIAL LEAD	SD SG	EEC-S0HDxxxx EEC-S5R5xxxx		-25 ~ +70°C	(5.5 Vdc) 0.022 ~ 0.33 F (5.5 Vdc) 0.47 ~ 1.5 F	• General purpose, 1,000 hrs. @ 70°C • μA range IC memory back-up		
		SE	EEC-SE0Hxxx			(5.5 Vdc) 0.022 ~ 0.22 F	• 1,000 hrs. @ 70°C • Lead taping for auto insertion		
		NF F	EEC-F5R5Uxxx EEC-F5R5Hxxx		-25 ~ +70°C -25 ~ +85°C	(5.5 Vdc) 0.1 ~ 1.5 F (5.5 Vdc) 0.047 ~ 1.0 F	• 1,000 hrs. @ 70°C, general purpose • 1,000 hrs. @ 85°C, high reliability		
		HW	EEC-HW0Dxxx		-25 ~ +70°C -25 ~ +60°C	(2.3 Vdc) 1 ~ 22 F (2.3 Vdc) 30 & 50 F (2.1 Vdc) 70 F	• Large capacitance • Backup for mA - A range		
LARGE CAN ALUMINUM	2 & 3 - TERMINAL SNAP-IN	TS-UP	ECO-SxxPxxx ECE-SxxPxxx ECE-3xxPxxx		-40~+85°C (-25°C: 350~500Vdc)	(16 ~ 500 Vdc) 33 ~ 68,000 μF	• General purpose • 2,000 ~ 3,000 hrs. @ 85°C • 20 mm low profile available		
		TS-UQ	EET-UQxxxxx		-40 ~ +85°C (-25°C: 350~450Vdc)	(160 ~ 450 Vdc) 82 ~ 100,000 μF	• General purpose, 85°C • 30% smaller than TS-UP		
		TS-HA	ECO-SxxAxxx ECE-SxxAxxx ECE-3xxAxxx		-40 ~ +105°C (-25°C: 385~450Vdc)	(10 ~ 450 Vdc) 33 ~ 68,000 μF	• 2,000 ~ 3,000 hrs. @ 105°C • 20 mm low profile available		
		TS-HB	ECO-SxxBxxx ECE-SxxBxxx ECE-3xxBxxx		-40 ~ +105°C (-25°C: 385~450Vdc)	(160 ~ 450 Vdc) 82 ~ 2,700 μF	• 3,000 hrs. @ 105°C • 20 ~ 25% smaller than TS-HA		
		TS-HC	EET-HCxxxxx		-40 ~ +105°C (-25°C: 350~450Vdc)	(10 ~ 450 Vdc) 100 ~ 100,000 μF	• 2,000 hrs. @ 105°C • 30% smaller than TS-HB		
		TS-ED	EET-EDxxxxx		-40 ~ +105°C (-25°C: 400~450Vdc)	(200 ~ 450 Vdc) 56 ~ 2,200 μF	• High ripple current capability • 3,000 hrs. @ 105°C		
		TS-EE	EET-EExxxxx		-40 ~ +105°C (-25°C: 400~450Vdc)	(200 ~ 450 Vdc) 75 ~ 1,800 μF	• 3,000 hrs. @ 105°C • Very high ripple current capability		
		TS-XB	EET-XBxxxxx		-40 ~ +105°C (-25°C: 315~450Vdc)	(160 ~ 450 Vdc) 39 ~ 2,200 μF	• Long life: 7,000 hrs. @ 105°C • Compact size		
	4&5 TERMINAL SNAP-IN	T-UP	ECE-TxxPxxx (4-Pin) ECE-PxxPxxx (5-Pin)		-40 ~ +85°C (-25°C: 350~500Vdc)	(16 ~ 500 Vdc) 470 ~ 120,000 μF	• 3,000 hrs. @ 85°C, 4 or 5-pin • Wide capacitance range		
		T-HA	ECE-TxxAxxx (4-Pin) ECE-PxxAxxx (5-Pin)		-40 ~ +105°C (-25°C: 350~450Vdc)	(16 ~ 450 Vdc) 390 ~ 120,000 μF	• 3,000 hrs. @ 105°C, 4 or 5-pin • Wide capacitance range		

NOTE: These parts are RoHS compliant.