

Discontinued Series (not recommended for new design)

Polymer Aluminum Capacitors

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μ F)	Series	Endurance	Page
CB	ECGC--B---R-	-40 °C to 105 °C	Low ESR	4 to 16	2.2 to 82	CD	-40 °C to 105 °C	EE14
SD	EEFSD-----	-40 °C to 105 °C	Low ESR	2 to 6.3	120 to 390	SX	-40 °C to 105 °C	EE17

Aluminum Electrolytic Capacitors (Surface Mount Type)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μ F)	Series	Endurance	Page
V-G	ECEV--G---R, P-	+105 °C 1000 h	Height 5.5 mm	6.3 to 50	0.1 to 470	V-HA	+105 °C 1000 h	EE36
V-A	ECEV--A---R, P	+ 85 °C 1000 h	Height 5.5 mm	4 to 50	0.1 to 1000	V-S	+ 85 °C 2000 h	EE28
	ECEV--A---NR, P	+ 85 °C 1000 h	Height 5.5 mm BP	6.3 to 50	0.22 to 47			
V-FE	EEVFE-----	+105 °C 1000 h	Low impedance	6.3 to 35	1 to 1000	V-FK	+105 °C 2000 to 5000 h	EE59
V-GG	ECEV--G---G	+105 °C 2000 h	Longlife	6.3 to 50	0.1 to 220	HB	+105 °C 2000 h	EE43
	ECEV--G---N	+105 °C 2000 h	Longlife Bi-polar	6.3 to 50	0.1 to 47	HB-BP		
V-TA	EEVTA-----	+125 °C 1000 h	For Automotive Application, Containing Pb	10 to 50	10 to 330	V-TG	+125 °C 1000 to 2000 h	EE70
V-TB	EEVTB-----	+125 °C 500 to 1000 h	Low temp. Characteristic stability type	10 to 50	10 to 330			

Aluminum Electrolytic Capacitors (Radial Lead Type)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μ F)	Series	Endurance	Page
S SW S (High voltage)	ECEA--S-----	+ 85 °C 1000 h	Standard	10 to 50	1 to 100	M	+ 85 °C 2000 h	EE123
S Bi-polar	ECEA--N---S	+ 85 °C 2000 h	Bi-polar Standard	4 to 100	0.1 to 1000	SU-BP	+ 85 °C 2000 h	EE128
SU	ECEA--U-----	+ 85 °C 2000 h	Standard	6.3 to 450	0.1 to 15000	M	+ 85 °C 2000 h	EE123
K	ECEA--K-----	+ 85 °C 1000 h	Height 7 mm	6.3 to 50	0.1 to 100	KA	+ 85 °C 1000 h	EE131
KS(ϕ 3)	ECEA--KK----	+ 85 °C 1000 h	Height 5 mm ϕ 3x5	4 to 50	0.1 to 22	Available upon request		
KG	ECEA--KG-----	+105 °C 1000 h	Height 7 mm	6.3 to 50	0.1 to 220	GA	+105 °C 1000 h	EE119
SS	ECEA--SS---	+ 85 °C 2000 h	Low profile	6.3 to 50	3.3 to 4700	Available upon request		
Z	ECEA--Z----	+ 85 °C 2000 h	Low impedance	6.3 to 50	0.1 to 2200	FC	+105 °C 1000 to 5000 h	EE81
HF	ECEA--F----	+105 °C 2000 h	Low impedance	10 to 63	22 to 2200			
HFS	ECEA--FS---	+105 °C 1000 to 2000 h	Low impedance	6.3 to 63	0.47 to 4700			
HFE	ECEA--FE---	+105 °C 2000 h	Low impedance	6.3 to 100	3.3 to 15000			
HFG	ECA--FG----	+105 °C 2000 to 5000 h	Low impedance	6.3 to 63	0.1 to 15000			
HFQ	ECA--FQ----	+105 °C 1000 to 2000 h	Low impedance	6.3 to 63	6.8 to 15000			
HFZ	ECA--FZ----	+105 °C 5000 h	Low impedance	6.3 to 35	56 to 5600			
KF	ECA--KF----	+105 °C 1000 h	Height 7 mm Low impedance	6.3 to 35	1 to 120			
ESM	ECEA--E---M	+ 85 °C 2000 h	Low impedance	10 to 50	0.1 to 220			
FA	EEUFA-----	+105 °C 2000 to 5000 h	Low impedance	6.3 to 63	68 to 15000			
FB	EEUFB-----	+105 °C 1000 to 2000 h	Low impedance	10 to 50	0.47 to 10000			
NHE	ECEA--GE---	+ 85 °C 2000 h	Longlife	6.3 to 450	0.1 to 15000	NHG	+105 °C 1000 to 2000 h	EE114
MH	ECA--MH---	+105 °C 1000 h	Longlife	6.3 to 100	0.1 to 22000			
NH	ECEA--G---S	+105 °C 2000 h	Longlife	6.3 to 100	0.47 to 4700			
NE	ECA--TE---	+105 °C 5000 to 7000 h	Longlife	10 to 63	0.47 to 3300	EB	+105 °C 5000 to 10000 h	EE104
NX	ECEA--NX---	+105 °C 5000 h	Longlife	6.3 to 50	0.047 to 2200			
3H	ECEA--T----	+125 °C 1000 h	High reliability	10 to 63	1 to 1000	TA	+125 °C 2000 h	EE111
MG	EEUMG----	+ 85 °C 2000 h	High ripple	160 to 450	2.2 to 470	Available upon request		

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TH	ECEA--V---T	+105 °C 1000 h	Fixed time-interval circuit	10, 16, 25, 50	1 to 2200	NHG	+105 °C 1000 to 2000 h	EE114
MT	ECEA--M---T	+ 85 °C 1000 h	Time constant circuit	6.3 to 50	47 to 2200	M	+85 °C 2000 h	EE123
MS	ECEA--M---	+ 85 °C 2000 h	Low LC	10 to 50	0.1 to 100			
GA	EEUGA-----	+105 °C 2000 h	+105°C Standard	6.3 to 50	0.1 to 15000	NHG	+105 °C 1000 to 2000 h	EE114
EA	EEUEA-----	+105 °C 5000 h	Longlife	160 to 450	10 to 150	EE	+105 °C 8000 to 10000 h	EE107
ED	EEUED-----	+105 °C 5000 h	Longlife	160 to 450	10 to 330			
Horizontal deflection current correction	ECEA--W----	+ 85 °C 2000 h	Horizontal deflection current correction for TV	25	3.5 to 10	Not available		

Aluminum Electrolytic Capacitors (Snap-in Type)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μ F)	Series	Endurance	Page
U	ECES--U---	+ 85 °C 2000 h	+ 85 °C Standard	16 to 450	0.1 to 1000	UP/ UQ	+ 85 °C 2000 h	EE169
UE	ECOS--U----	+ 85 °C 2000 h	+ 85 °C Standard	200 to 450	47 to 820	UP/ UQ	+ 85 °C 2000 h	EE169
NH	ECES--G----	+105 °C 2000 h	+ 85 °C Standard	16 to 250	100 to 22000	HC	+105 °C 2000 h	EE147
NHE	ECOS--G---	+105 °C 2000 h	+ 105 °C Standard	10 to 450	33 to 39000	HC	+105 °C 2000 h	EE147
NXA	ECOS--X---	+105 °C 2000 h	Longlife	160 to 400	39 to 1200	XB	+105 °C 7000 h	EE162
EX	ECEC2EG--- ECOS2EG---	+105 °C 2000 h	For VDE-806 Standard	250	100 to 1200	Available upon request		
MC	ECEC--C--- ECES--C---	+105 °C 2000 h	For DC over voltage	200 to 450	39 to 1500	MD	+105 °C 2000 h	EE167
ED	EETED-----	+105 °C 3000 h	High ripple	200 to 450	56 to 2200	EE	+105 °C 3000 h	EE140
UP	ECEC--P---	+85 °C 2000 h	+ 85 °C Standard	16 to 450	33 to 68000	UQ	+ 85 °C 2000 h	EE169
HA	ECEC--A---	+105 °C 2000 h	+ 105 °C Standard	10 to 400	33 to 68000	HC	+ 85 °C 2000 h	EE147
HB	ECEC--B---	+105 °C 2000 h	+ 105 °C Standard	160 to 450	82 to 2200			
TU	ECET--U---	+ 85 °C 2000 h	Snap in Type Large Cap.	16 to 450	330 to 82000	Available upon request		
NH	ECET--G---	+105 °C 2000 h	+105 °C Standard					
NHE	ECET--G---- ECOT--G----	+105 °C 2000 h	+105 °C Standard	16 to 450	47 to 22000			

Electric Double Layer Capacitors

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μ F)	Series	Endurance	Page
ST-S	EECS5RT----	+ 70 °C 1000 h	Taping	5.5	0.022 to 0.22	Not available		
EL	EECE0EL---	+ 70 °C 1000 h	Stacked Coin Type	2.5	0.47 to 2.0	Not available		
AL	EECA0EL---	+70 °C 1000 h	Radial Lead Type	2.5	1.0 to 10	HW	+70 °C 1000 h	EE205
						HZ	+60 °C 1000 h	EE204
EM	EECEM---	+70 °C 500 h	S.M.T	2.5	0.2F	EN	+60 °C 500 h	EE201

Check Panasonic website for discontinued / revised product series specification.

Panasonic Electronic Devices website : <http://panasonic.net/ped/>