Discontinued Series (not recommended for new design)

■ Products discontinued in March 2006.

- Screw-terminal Type Aluminum Electrolytic Capacitor (ECEG--)
- Lug-terminal Type Aluminum Electrolytic Capacitor (ECEM--)
- Tantalum Electrolytic Capacitor (S.M.T ECST--)
- Tantalum Electrolytic Capacitor (Dip Type ECSF--)

■ Products discontinued in March 2007.

Electric Double Layer Capacitors

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	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		

Polymer Aluminum Capacitor

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	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	014

■ Product discontinued in March 2008.

✻ Last shipment will be at the end of March 2008.

✻ Please proceed the replacement as soon as possible.

✻ Please contact sales office for details information.

S.M.T (V Type)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	Series	Endurance	Page
V-V	ECEV--V----S-	+105 °C 2000 h	Longlife	4 to 50	0.1 to 220	HB	+105 °C 2000 h	041
	ECEV--N----S-	+ 85 °C 2000 h	Longlife Bi-polar	6.3 to 50	0.22 to 47			
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	034
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	026
	ECEV--A----NR, P	+ 85 °C 1000 h	Height 5.5 mm BP	6.3 to 50	0.22 to 47			
V-MC	EEVMC--------	+ 85 °C 1000 h	Height 5.5 mm Low profile	4 to 50	0.1 to 220	Not available		
V-FE	EEVFE------	+105 °C 1000 h	Low impedance	6.3 to 35	1 to 1000	V-FK	+105 °C 2000 to 5000 h	055
V-GG	ECEV--G---G	+105 °C 2000 h	Longlife	6.3 to 50	0.1 to 220	HB	+105 °C 2000 h	041
	ECEV--G---N	+105 °C 2000 h	Longlife Bi-polar	6.3 to 50	0.1 to 47	HB-BP		
V-HD	EEVHD------	+105 °C 5000 h	Longlife	10 to 100	0.47 to 330	Available upon request		
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	066
V-TB	EEVTB------	+125 °C 500 to 1000 h	Low temp. Characteristic stability type	10 to 50	10 to 330	V-TK	+125 °C 3000 h	069

Radial Lead Type (A Type)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	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	114
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	119
SA (SB)	ECA--SA----- ECA--SB-----	+ 85 °C 1000 h	Height 7 mm max.	4 to 50	0.1 to220	KS	+85 °C 1000 h	126
SU	ECEA--U-----	+ 85 °C 2000 h	Standard	6.3 to 450	0.1 to 15000	M	+ 85 °C 2000 h	114
K	ECEA--K-----	+ 85 °C 1000 h	Height 7 mm	6.3 to 50	0.1 to 100	KA	+ 85 °C 1000 h	122
KS(ϕ3)	ECEA--KK----	+ 85 °C 1000 h	Height 5 mm ϕ3×5	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	110
SS	ECEA--SS---	+ 85 °C 2000 h	Low profile	6.3 to 50	3.3 to 4700	Available upon request		

Discontinued Series (not recommended for new design)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	Series	Endurance	Page
Z	ECEA--Z----	+ 85 °C 2000 h	Low impedance	6.3 to 50	0.1 to 2200	FC	+105 °C 1000 to 5000 h	077
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	105
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	096
NX	ECEA--NX---	+105 °C 5000 h	Longlife	6.3 to 50	0.047 to 2200			
NXL	ECA--XL-----	+105 °C 10000 h	Longlife	10 to 50	1 to100	EB Low voltage products (10V to 63V)	+105 °C 5000 to 10000 h	096
	ECA--NL-----		Longlife Bi-polar	10 to 50	1 to100			
NXS	ECA--XS-----	+105 °C 5000 h	Longlife Height 5 mm	10 to 50	0.1 to 68			
3H	ECEA--T----	+125 °C 1000 h	High reliability	10 to 63	1 to 1000	TA	+125 °C 2000 h	102
MG	EEUMG----	+ 85 °C 2000 h	High ripple	160 to 450	2.2 to 470	Available upon request		
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	105
MT	ECEA--M---T	+ 85 °C 1000 h	Time constant circuit	6.3 to 50	47 to 2200	M	+85 °C 2000 h	114
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	105
EA	EEUEA-----	+105 °C 5000 h	Longlife	160 to 450	10 to 150	EE	+105 °C 8000 to 10000 h	098
EB High voltage products (160V to 450V)	EEUEB----- (High voltage products)	+105 °C 5000 h	Longlife	160 to 450	10 to 150			
ED	EEUED-----	+105 °C 5000 h	Longlife	160 to 450	10 to 330			
Horizontal defection current correction	ECEA--W----	+ 85 °C 2000 h	Horizontal defection current correction for TV	25	3.5 to 10	Not available		

Snap in Type (TS)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	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	000/158
UE	ECOS--U----	+ 85 °C 2000 h	+ 85 °C Standard	200 to 450	47 to 820	UP/ UQ	+ 85 °C 2000 h	000/158
NH	ECES--G----	+105 °C 2000 h	+ 85 °C Standard	16 to 250	100 to 22000	HC	+105 °C 2000 h	138
NHE	ECOS--G---	+105 °C 2000 h	+ 105 °C Standard	10 to 450	33 to 39000	HC	+105 °C 2000 h	138
NXA	ECOS--X---	+105 °C 2000 h	Longlife	160 to 400	39 to 1200	XB	+105 °C 7000 h	151
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	156
ED	EETED------	+105 °C 3000 h	High ripple	200 to 450	56 to 2200	EE	+105 °C 3000 h	131
UP	ECEC--P---	+85 °C 2000 h	+ 85 °C Standard	16 to 450	33 to 68000	UQ	+ 85 °C 2000 h	158
HA	ECEC--A---	+105 °C 2000 h	+ 105 °C Standard	10 to 400	33 to 68000	HC	+ 85 °C 2000 h	138
HB	ECEC--B---	+105 °C 2000 h	+ 105 °C Standard	160 to 450	82 to 2200			

Discontinued Series (not recommended for new design)

Snap in Type (TS)

Discontinued Product						Replacement		
Series	Part No.	Endurance	Features	Rated.W.V. (V)	Capacitance (μF)	Series	Endurance	Page
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 (μF)	Series	Endurance	Page
AL	EECA0EL---	+70 °C 1000 h	Radial Lead Type	2.5	1.0 to 10	HW	+70 °C 1000 h	192
						HZ	+60 °C 1000 h	191
EM	EECEM---	+70 °C 500 h	S.M.T	2.5	0.2F	EN	+60 °C 500 h	189

Check Panasonic website for discontinued / revised product series specification.

Panasonic Electronic Devices website : http://panasonic.co.jp/ped/en