SP-Cap / Conductive Polymer Aluminum Electrolytic Capacitors (Surface Mount Type)


	Series	Part No.	Features		Category Temp. Range	Rated W.V. (V)	Capacitance (µF)
NEW	CS	EEFCS----R	Low Profile (1.1±0.1 mm Height)	ESR : 15 mΩ	–40 to 105 °C	4 to 6.3	68 to 120
NEW	CT	EEFCT----R	Low Profile (1.4±0.1 mm Height)	ESR : 15 mΩ	–40 to 105 °C	4 to 6.3	100 to 180
NEW	SS	EEFSS----R	Low Profile (1.1±0.1 mm Height)	ESR : 6 mΩ	–40 to 105 °C	2 to 2.5	180 to 220
NEW	ST	EEFST----R	Low Profile (1.4±0.1 mm Height)	ESR : 6 mΩ	–40 to 105 °C	2 to 2.5	270 to 330
NEW	LS	EEFLS----R	Low Profile, Low ESL (1.1±0.1 mm Height)	ESR : 6 mΩ	–40 to 105 °C	2 to 2.5	180 to 220
NEW	LT	EEFLT----R	Low Profile, Low ESL (1.4±0.1 mm Height)	ESR : 6 mΩ	–40 to 105 °C	2 to 2.5	270 to 330
	FD	EEFFD-----R	Low Profile (1.1±0.1 mm Height)	ESR : 28 mΩ to 40 mΩ	–40 to 105 °C	2 to 12.5	15 to 68
	CD	EEFCD-----R, ER EEFCD-----XR, XE	Standard (1.8±0.1 mm Height)	ESR : 15 mΩ to 110 mΩ	–40 to 105 °C	2 to 16	2.2 to 220
	CX	EEFCX------R, XR	Standard (1.9±0.2 mm Height)	ESR : 15 mΩ / 12 mΩ	–40 to 105 °C	2 to 6.3	100 to 560
	UD	EEFUD-----R, ER EEFUD-----XR, XE EEFUD-----LR, LE	Standard (2.8±0.2 mm Height)	ESR : 9 mΩ to 18 mΩ	–40 to 105 °C	2 to 8	68 to 470
	UE	EEFUE-----R, ER EEFUE-----XR, XE EEFUE-----LR, LE	Standard (4.2±0.1 mm Height)	ESR : 7 mΩ to 15 mΩ	–40 to 105 °C	2 to 8	100 to 560
	SL	EEFSL-----R, ER	Low ESR (1.8±0.1 mm Height)	ESR : 9 mΩ	–40 to 105 °C	2 to 6.3	56 to 220
Upgrade	SX	EEFSX-----R, ER EEFSX-----XR, XE EEFSX-----E7, E4	Low ESR (1.9±0.2 mm Height)	ESR : 4.5 mΩ to 9 mΩ	–40 to 105 °C	2 to 6.3	82 to 560
Upgrade	GX	EEFGX-----R	Ultra Low ESR (1.9±0.2 mm Height)	ESR : 3 mΩ	–40 to 105 °C	2 to 2.5	330 to 560
Upgrade	LX	EEFLX-----R, R4	Low ESR, Low ESL (1.9±0.2 mm Height)	ESR : 6 mΩ / 4.5 mΩ	–40 to 105 °C	2 to 2.5	330 to 560
	MC	EEFMC-----R	Miniaturization (1.9±0.2 mm Height)	ESR : 12 mΩ to 18 mΩ	–40 to 105 °C	2 to 6.3	47 to 120

Conductive Polymer Hybrid Aluminum Electrolytic Capacitors (Surface Mount Type)

	Series	Part No.	Features	Endurance	Standard	Miniaturization	Low profile	Low Imp.	Long Life	Rated W.V. (V)	Capacitance (µF)
NEW	ZA	EEHZA---	Low impedance, High ripple	+105 °C 10000 h				●	●	25 to 80	10 to 330
NEW	ZC	EEHZC---	Low impedance, High ripple	+125 °C 4000 h				●	●	25 to 63	10 to 330

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(W.V., Capacitance, Case size, Ripple current) you can see the specified part number.

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Aluminum Electrolytic Capacitors (Surface Mount Type)


Series	Part No.	Features	Endurance	Standard	Miniaturization	Low profile	Low Imp.	Long Life	Rated W.V. (V)	Capacitance (µF)
S	EEE---A----A	+85 °C Standard, High temperature reflow	+85 °C 1000 h to 2000 h	●					6.3 to 50	0.1 to 1500
	EEE---S----- EEE---A-----	+85 °C Standard							4 to 100	
	EEE---A---N	+85 °C Standard, Bi-polar							6.3 to 50	
HA	EEEHA-----A	+105 °C Standard, High temperature reflow	+105 °C 1000 h					●	6.3 to 50	0.1 to 1500
	EEEHA-------	+105 °C Standard							6.3 to 100	
HB	EEEHB-----A	+105 °C Standard, High temperature reflow	+105 °C 2000 h					●	6.3 to 50	0.1 to 1500
	EEEHB------	+105 °C Standard							4 to 50	
	EEEHB-----S	+105 °C Standard, 5.4 mm height								
	EEEHP------	+105 °C Standard, Bi-polar								
HC	EEEHC------	Longlife	+105 °C 3000 h (φ8, 10 : 5000 h)					●	6.3 to 50	0.1 to 1000
HD	EEEHD-----A	Longlife, High temperature reflow	+105 °C 5000 h					●	6.3 to 100	0.47 to 7500
	EEEHD------	Longlife								
FC	EEEFC-----A	Low impedance, High temperature reflow	+105 °C 1000 h				●	●	6.3 to 35	1 to 1500
	EEEFC------	Low impedance (50% less than HA Series)							6.3 to 50	
FK	EEEFK-----A	Low impedance, High temperature reflow	+105 °C 2000 to 5000 h				●	●	6.3 to 100	4.7 to 6800
	EEEFK------	Low impedance (40 to 60% less than FC Series)								3.3 to 1500
NEW FT	EEEFT-----A	Low impedance, High temperature reflow	+105 °C 2000 h				●	●	6.3 to 50	10 to 2200
FP	EEEFP-----A	Low ESR (30 to 60% less than FK Series), High temperature reflow	+105 °C 2000 h		●			●	6.3 to 50	10 to 1800
TG	EEETG----- EEVTG-----	Miniaturization (40% less than TA Series)	+125 °C 1000 h to 2000 h		●			●	10 to 100	10 to 4700
TK	EEETK-----A	Low ESR, High temperature reflow	+125 °C 2000 h					●	10 to 100	47 to 4700
	EEETK------	Low ESR (50% less than TG Series)	+125 °C 3000 h						10 to 35	47 to 470
TP	EEETP-----A	Low ESR (Low temp. / after Endurance), High temperature reflow	+125 °C 3000 h (D8 : 2000 h)					●	10 to 35	47 to 470
NEW TQ	EEETQ-----	Low ESR (Low temp. / after Endurance), High temperature reflow	+125 °C 2000 h					●	35	47 to 100
EB	EEVEB------	Large Can Size (φ10 to φ18), High Voltage	+ 105 °C 3000 to 5000 h					●	160 to 450	2.2 to 100

Aluminum Electrolytic Capacitors (Radial Lead Type)

Series	Part No.	Features	Endurance	Standard	Miniaturization	Low profile	Low Imp.	Long Life	Rated W.V. (V)	Capacitance (µF)
FC	EEAFC----- EEUFC-----	Low impedance	+105 °C 1000 to 5000 h				●	●	6.3 to 100	1 to 15000
FK	EEUFK------	Low impedance (20 to 30% less than FC Series)	+105 °C 3000 to 5000 h				●	●	6.3 to 35	180 to 12000
FM	EEUFM------	Low impedance (40 to 70% less than FC Series)	+105 °C 2000 to 7000 h				●	●	6.3 to 50	22 to 6800
Upgrade FR	EEUFR------	Low impedance (Same as FM Series)	+105 °C 5000 to 10000 h				●	●	6.3 to 63	4.7 to 8200
EB	EEUEB------	High ripple, Long life	+105 °C 5000 to 10000 h					●	10 to 450	0.47 to 3300
EE	EEUEE------	High ripple (more than ED Series)	+105 °C 8000 to 10000 h					●	160 to 450	10 to 330
TA	EEUTA------	+125 °C Standard	+125 °C 2000 h					●	10 to 63	1 to 4700
TP	EEUTP------	High ripple (20 to 40% higher than TA Series)	+125 °C 1000 to 2000 h +135 °C 2000 to 5000 h					●	25 to 35	100 to 5100
NHG	ECA--HG----	+105 °C Standard	+105 °C 1000 to 2000 h	●					6.3 to 450	0.1 to 22000
HD	EEUHD---	+105 °C Miniaturization	+125 °C 1000 to 2000 h		●				10 to 50	0.1 to 22000

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Aluminum Electrolytic Capacitors (Radial Lead Type)

Series	Part No.	Features	Endurance	Standard	Miniaturization	Low profile	Low Imp.	Long Life	Rated W.V. (V)	Capacitance (μF)
GA	EEAGA------	+105 °C Standard, 7 mm height	+105 °C 1000 h	●					10 to 50	0.1 to 220
GA Bi-polar	ECA--EN----	+105 °C Standard, Bi-polar	+105 °C 1000 to 2000 h	●					6.3 to 50	0.47 to 330
M	ECA--M-----	+85 °C Standard	+85 °C 2000 h	●					6.3 to 450	0.1 to 22000
SU Bi-polar	ECEA--N---U ECEA--N---X	+85 °C Standard, Bi-polar	+85 °C 2000 h	●					6.3 to 50	0.47 to 6800
KA	ECEA--KA----	+85 °C Standard, 7 mm height	+85 °C 1000 h	●					4 to 50	0.1 to 470
KA Bi-polar	ECEA--KN----	+85 °C Standard, 7 mm height Bi-polar	+85 °C 1000 h	●					4 to 50	0.1 to 100
KS	ECEA--KS----	+85 °C Standard, 5 mm height	+85 °C 1000 h		●	●			4 to 50	0.1 to 330
KS Bi-polar	ECEA--SN----	+85 °C Standard, 5 mm height Bi-polar, Miniaturization	+85 °C 1000 h		●	●			6.3 to 50	0.1 to 47

Aluminum Electrolytic Capacitors (Snap-In Type)

Series	Part No.	Features	Endurance	Standard	Miniaturization	Long Life	Rated W.V. (V)	Capacitance (μF)
EE	EETEE -------	Miniaturization, High ripple	+105 °C 3000 h			●	200 to 450	75 to 1800
ED	EETED-------	High ripple	+105 °C 3000 h			●	200 to 450	56 to 2200
HC	EETHC------	+105 °C Standard	+105 °C 2000 h	●	●		10 to 450	39 to 100000
HD	EETHD------	+105 °C Miniaturization	+105 °C 3000 h		●	●	400 to 450	120 to 680
XB	EETXB------	Longlife	+105 °C 7000 h			●	160 to 450	39 to 2200
UQ	EETUQ------	+85 °C Standard	+ 85 °C 2000 h	●	●		16 to 450	82 to 100000

Electric Double Layer Capacitors (Gold Capacitor)

Series	Part No.	Features	Endurance	Operating current			Rated W.V. (V)	Capacitance (F)
				μA	mA	A		
RG	EECRG0V----	Tabbed lead terminals, Highest reliability +85 °C 2000h	+85 °C 2000 h	●	●		3.6	0.22 / 1.0
RF	EECRF------	Highest reliability +85 °C 2000h	+85 °C 2000 h	●	●		5.5	0.1 / 0.68
SD	EECS0HD----	ϕ10 Tabbed lead terminals	+70 °C 1000 h	●			5.5	0.022 to 0.33
SG	EECS5R5( )---	ϕ19 Tabbed lead terminals	+70 °C 1000 h	●			5.5	0.47 to 1.5
SE	EECSE0H---	5 mm pitch lead taping	+70 °C 1000 h	●			5.5	0.022 to 0.22
NF	EECF5R5U---	Standard +70 °C 1000h	+70 °C 1000 h	●			5.5	0.1 to 1.5
F	EECF5R5H---	Highest reliability +85 °C 1000h	+85 °C 1000 h	●			5.5	0.033 to 1.0
HZ	EECHZ0E---	Radial lead Type, Miniaturization	+70 °C 1000 h		●	●	2.5	3.3 to 10
HW	EECHW0D---	Radial lead Type, large Cap.	+70 °C 1000 h (+60 °C)		●	●	2.1, 2.3	22 to 70

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