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## 1 Green-Cap (Electric Double Layer Capacitors)

★ New series  
☆ Upgrade series

Series	Features	Operating Temperature Range (°C)	Voltage Range (VDC)	Capacitance Range (F)	Load Life Time (hours)	Page
DM	Green-Cap Module	Green-Cap modules are supplied on custom-made basis.				28
DH	Axial type, high power density	-40 ~ 65	2.7	1200 ~ 3400	1500	29
DV	Axial type, high power density, high voltage	-40 ~ 65	2.85, 3.0	1200 ~ 3400	1500	30
DT	Axial type, high power density, high temp.	-40 ~ 85	2.5	1200 ~ 3000	1500	31
DB	Snap-in type, standard series	-25(-40) ~ 70(65)	2.5, 2.7	100 ~ 600	2000	32
DK	Snap-in type, high temp.	-40 ~ 85	2.7	100 ~ 400	1500	33
DA	Snap-in type, high voltage	-40 ~ 65	3.0	100 ~ 480	1500	34
DS	Lead type	-30(-40) ~ 70(65)	2.5, 2.7, 3.0	3 ~ 100	1000	35
DJ	Lead type, high temp.	-40 ~ 85	2.5	3 ~ 50	1000	36

## 2 Conductive Polymer Hybrid Aluminum Electrolytic Capacitors

Series	Features	Operating Temperature Range (°C)	Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page	
SMD	YC ☆	Chip type, Hybrid long life	-55 ~ 105	16 ~ 100	10 ~ 560	10000	40
	YH ☆	Chip type, Hybrid high temp.	-55 ~ 125	16 ~ 100	10 ~ 560	4000	42
	YT	Chip type, Hybrid ultra high temp.	-55 ~ 150	25 ~ 63	15 ~ 270	1000	44
LEAD	YB ☆	Lead type, Hybrid long life	-55 ~ 105	16 ~ 100	10 ~ 560	10000	45
	YG ☆	Lead type, Hybrid high temp.	-55 ~ 125	16 ~ 100	10 ~ 560	4000	47
	YF ☆	Lead type, Hybrid ultra high temp.	-55 ~ 150	25 ~ 63	15 ~ 270	1000	49

## 3 Conductive Polymer Aluminum Electrolytic Capacitors

Series	Features	Operating Temperature Range (°C)	Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page	
SMD	FA	Chip type, with conductive polymer (Hi-CAP)	-55 ~ 105	2.5 ~ 16	39 ~ 2700	2000	52
LEAD	FB	Lead type, with conductive polymer (Hi-CAP)	-55 ~ 105	2.5 ~ 16	100 ~ 3500	2000	54

## 4 Surface Mount Aluminum Electrolytic Capacitors

Series	Features	Operating Temperature Range (°C)	General	Miniature	Long Life	Solvent Proof	Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page
SMD	SC	Standard	●			●	4 ~ 450	1.0 ~ 2200	2000	60
	RC	Standard, wide temp.	●			●	6.3 ~ 50	1.0 ~ 1000	1000	62
	JH	Chip type, high ripple				●	6.3 ~ 450	3.3 ~ 2200	2000	63
	JM ☆	Chip type, long life			●	●	6.3 ~ 450	3.3 ~ 2200	3000	65
	CA	Chip type, long life	-55(-40) ~ 105		●	●	6.3 ~ 50	10 ~ 1000	5000	67
	CB	Chip type, long life, 5.5mmL height	-40 ~ 105	●	●	●	4 ~ 50	1.0 ~ 100	5000	68
	JL	Chip type, long life, for ECU	-40 ~ 105		●	●	10 ~ 50	33 ~ 470	10000	69
	ZC	5.5mmL chip type, low Impedance	-55 ~ 105			●	6.3 ~ 35	1.0 ~ 100	1000	70
	CK	Chip type, low Impedance, high CV	-55 ~ 105			●	6.3 ~ 100	10 ~ 1500	2000	71
	CD ☆	Chip type, extremely low Impedance	-55 ~ 105			●	6.3 ~ 100	10 ~ 1500	2000	73
	CG	Chip type, extremely low Impedance, miniature	-55 ~ 105	●		●	6.3 ~ 50	100 ~ 2200	2000	75
	CM	Chip type, extremely low Impedance, long life	-55 ~ 105		●	●	6.3 ~ 100	10 ~ 1000	3000 ~ 5000	77
	UC	Chip type, high temp. for 125°C use	-40 ~ 125			●	10 ~ 400	3.3 ~ 1000	2000	79
	UR	Chip type, high temp. low ESR. for 125°C use	-40 ~ 125	●	●	●	10 ~ 400	1 ~ 470	1000 ~ 5000	80
	UN ☆	Chip type, low ESR for 125°C use, Ø6.3×7.7	-40 ~ 125			●	35	47 ~ 330	2000	82
	KC	Chip type, high temp. for 135°C use, low ESR	-40 ~ 135			●	10 ~ 50	47 ~ 470	2000	83
	CW	Chip type, high reliability	-40 ~ 150			●	10 ~ 50	33 ~ 1000	1000 ~ 2000	84
	NC	5.3mmL chip, non-polarized	-40 ~ 85			●	6.3 ~ 50	1.0 ~ 47	2000	85
	CN	Chip type, wide temp. non-polarized	-55(-40) ~ 105			●	6.3 ~ 50	1.0 ~ 47	1000	86

## 51 Miniature Aluminum Electrolytic Capacitors

★ New series  
☆ Upgrade series

Series	Features	Operating Temperature Range (°C)	General	Miniature	Long Life	Solvent Proof	Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page	
General Type(85°C)	SD	Standard	-40(-25) ~ 85	●			●	6.3 ~ 500	1.0 ~ 22000	2000	91
	SS	Standard, height 7mmL	-40 ~ 85		●		●	4 ~ 63	1.0 ~ 220	2000	93
	SE	Standard, height 5mmL	-40 ~ 85		●		●	4 ~ 63	1.0 ~ 330	2000	94
General Type(105°C)	RD ☆	Standard, wide temp	-55(-40,-25) ~ 105	●			●	6.3 ~ 500	1.0 ~ 22000	1000 ~ 2000	95
	RK	Wide temp. range, height 7mmL	-55 ~ 105		●		●	4 ~ 63	1.0 ~ 68	1000	97
	RE	Wide temp. range, height 5mmL	-55 ~ 105		●		●	4 ~ 50	1.0 ~ 220	1000	98
Low Impedance	ZS	Height 7mmL, low impedance, high ripple	-40 ~ 105		●		●	6.3 ~ 50	2.2 ~ 330	2000	99
	ZL	Height 7mmL, low impedance, high ripple	-40 ~ 105		●	●	●	6.3 ~ 50	2.2 ~ 330	3000	100
	ZE	Height 5mmL, low impedance, high ripple	-55 ~ 105		●			6.3 ~ 35	1.0 ~ 100	2000	101
	ZT	Height 7mmL, long life	-40 ~ 105		●	●	●	6.3 ~ 50	2.2 ~ 330	5000	102
	RZ	Extremely low impedance, high reliability	-55 ~ 105			●	●	6.3 ~ 63	1.0 ~ 15000	2000 ~ 5000	103
	WL	Extremely low impedance, miniaturized, wide voltage	-40(-25) ~ 105			●	●	6.3 ~ 500	1.0 ~ 15000	2000 ~ 5000	105
	RP	Extremely low impedance, long life	-55 ~ 105			●	●	6.3 ~ 50	1.0 ~ 15000	4000 ~ 10000	108
	WF	Extremely low impedance, miniaturized, long life	-40 ~ 105		●	●	●	6.3 ~ 100	1.0 ~ 15000	5000 ~ 10000	110
	MK ☆	Ultra low impedance, miniaturized, high ripple	-40 ~ 105		●	●	●	6.3 ~ 100	1.0 ~ 15000	2000 ~ 5000	112
	MZ	Ultra low impedance, miniaturized, high ripple	-40 ~ 105		●	●	●	6.3 ~ 100	1.0 ~ 15000	2000 ~ 5000	115
	LZ	Ultra low impedance, long life	-40 ~ 105		●	●	●	6.3 ~ 50	10 ~ 8200	6000 ~ 10000	117
	ML	Ultra low impedance, long life	-40 ~ 105		●	●	●	6.3 ~ 100	10 ~ 10000	6000 ~ 10000	119
	KN ☆	Ultra low impedance, high ripple	-40 ~ 105		●	●	●	10 ~ 50	33 ~ 3300	2000 ~ 5000	121
	MH ☆	Ultra low impedance, long life	-40 ~ 105		●	●	●	6.3 ~ 50	10 ~ 10000	7000 ~ 12000	123
	QY ★	For LED lighting applications, long life	-25 ~ 105		●	●	●	35 ~ 50	22 ~ 560	13000	125
	MG	For LED lighting applications, long life	-55 ~ 105			●	●	10 ~ 35	100 ~ 4700	20000	126
	MD	Ultra low impedance, high ripple	-40 ~ 105		●		●	6.3 ~ 16	470 ~ 3300	2000	127
	KS	For PSU applications, high ripple, long life	-25 ~ 85			●		420 ~ 500	47 ~ 150	8000	128
	PSU, Charger, Adapter, LED	SB	For PSU applications, high ripple, long life	-25~85			●		420 ~ 500	47 ~ 150	10000
LY		For LED lighting applications, long life	-25 ~ 105		●	●	●	10 ~ 100	1 ~ 330	10000	130
LQ		For LED lighting applications, ultra low imp., high ripple	-40~105		●	●	●	6.3 ~ 120	27 ~ 8200	6000 ~ 10000	131
LJ		For LED lighting applications, wide voltage, high temp. for 130°C use	-40(-25) ~ 130				●	10 ~ 400	1.0 ~ 4700	1000 ~ 4000	133
VP ☆		For LED lighting applications, high temp. for 135°C use	-40 ~ 135				●	10 ~ 35	220 ~ 6800	3000	135
RH		For PSU applications, high ripple current	-40(-25) ~ 105			●		160 ~ 500	1.0 ~ 220	5000	137
BH		For PSU applications, high ripple current	-25 ~ 105			●		200 ~ 400	2.2 ~ 100	5000	139
MT		For Display applications, high reliability	-40 ~ 105			●		160 ~ 500	10 ~ 470	12000	140
BL ☆		For PSU applications, long life	-40(-25) ~ 105			●		160 ~ 500	1.0 ~ 150	10000	142
KA		For PSU applications, high ripple current	-40(-25) ~ 105			●		400 ~ 500	3.3 ~ 150	3000	144
KU		For PSU applications, long life, high ripple current	-40(-25) ~ 105			●		400 ~ 500	1.0 ~ 150	5000	146
KJ		For PSU applications, extremely long life, high ripple current	-40(-25) ~ 105			●		160 ~ 500	1 ~ 470	12000	148
MP		For Display applications, long life	-40 ~ 105			●		160 ~ 500	10 ~ 470	12000 ~ 15000	150
MJ ☆		For PSU applications, high ripple, long life	-40(-25) ~ 105			●		160 ~ 500	3.3 ~ 470	20000	152
BK	For PSU applications, high temp. for 125°C use	-25 ~ 125			●		160 ~ 450	2.2 ~ 47	2000 ~ 5000	154	
Special Applications	MW	High ripple current, long life	-40(-25) ~ 105			●		25 ~ 500	3.3 ~ 470	5000	155
	RB	High temp. range, for 125°C use, miniaturized	-55(-40) ~ 125		●		●	6.3 ~ 250	1.0 ~ 15000	1000 ~ 2000	156
	WP ★	High temp. range, for 125°C use, long life	-40 ~ 125		●	●	●	35 ~ 100	270 ~ 4700	5000	159
	WT	High temp. range, for 125°C use, long life, low impedance	-40 ~ 125		●	●	●	6.3 ~ 100	10 ~ 3300	2000 ~ 5000	161
	VQ ☆	High temp. range, for 150°C use, low impedance	-40 ~ 150				●	10 ~ 100	33 ~ 5600	1000	163
Non-polarize	NP	Standard	-40 ~ 85	●			●	6.3 ~ 250	1.0 ~ 10000	2000	165
	NS	Height 7mm	-40 ~ 85		●		●	6.3 ~ 63	1.0 ~ 47	2000	167
	NE	Height 5mm	-40 ~ 85		●		●	6.3 ~ 50	1.0 ~ 47	1000	168
	RN	Wide Temp. range	-40 ~ 105				●	6.3 ~ 100	1.0 ~ 6800	1000	169

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## ⑥ Large Aluminum Electrolytic Capacitors

★ New series  
☆ Upgrade series

Series	Features	Operating Temperature Range (°C)					Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page
			General	Miniature	Long life	Solvent Proof				
Snap-in Terminal	HC	Standard	-40(-25) ~ 85	●		●	6.3 ~ 550	47 ~ 100000	2000	175
	HJ	Miniaturized	-40(-25) ~ 85		●	●	10 ~ 500	56 ~ 56000	3000	178
	HF	Long life	-40(-25) ~ 85		●	●	160 ~ 450	56 ~ 3300	5000	181
	HE	Wide temp.range, standard	-40(-25) ~ 105	●		●	6.3 ~ 550	47 ~ 68000	2000	183
	JK	Wide temp.range, high ripple current	-40(-25) ~ 105	●			250 ~ 450	82 ~ 1500	2000	186
	HK	Wide temp.range, miniaturized	-40(-25) ~ 105		●	●	6.3 ~ 500	68 ~ 68000	3000	187
	HG	Wide temp.range, high ripple current	-40(-25) ~ 105		●		250 ~ 450	150 ~ 680	3000	190
	KG ☆	Wide temp. High ripple current	-40 ~ 105		●		400 ~ 500	68 ~ 470	3000	191
	HL	Wide temp.range, miniaturized, long life	-40(-25) ~ 105		●	●	10 ~ 500	68 ~ 56000	5000	192
	JF	Wide temp. range, long life, high ripple current	-40 ~ 105		●	●	400 ~ 450	56 ~ 470	5000	195
	HY	Wide temp.range, long life	-40(-25) ~ 105			●	160 ~ 500	68 ~ 1800	7000	196
	JY	Wide temp.range, long life	-25 ~ 105			●	400 ~ 450	47 ~ 470	10000	198
	HB	High temp. range, for 125°C use	-40 ~ 125			●	10 ~ 250	100 ~ 15000	1000	199
LM	For general use	-40(-25) ~ 85	●		●	16 ~ 450	68 ~ 150000	2000	201	
Screw Terminal	GT ☆	Standard	-40(-25) ~ 85	●			16 ~ 500	180 ~ 680000	2000	203
	CU	WideTemp. range, standard	-40(-25) ~ 105	●			16 ~ 500	1000 ~ 470000	2000	206
	GF	For inverter circuits, long life	-25 ~ 85			●	350 ~ 600	1000 ~ 12000	5000	209
	GR	For inverter circuits, long life, high ripple	-25 ~ 85			●	400 ~ 450	1000 ~ 10000	5000	211
	GL	High ripple, long life	-25 ~ 85			●	350 ~ 450	1500 ~ 12000	20000	213
	EV	For inverter circuits, long life	-25 ~ 105			●	400 ~ 500	1000 ~ 6800	2000 ~ 5000	214
	EY	For inverter circuits, long life	-25 ~ 105			●	350 ~ 450	1500 ~ 12000	7000	215
Special Type	LW,SW	For welding machine	-25 ~ 85			●	315, 475	225 ~ 2200	-	216
	AM	For audio equipment	-40 ~ 55				16 ~ 100	470 ~ 33000	2000	217
	DF	For photo flash	-20 ~ 85				330, 360	200 ~ 1500	-	218
	AR,AL	For invertet air-conditioning system	-40(-25) ~ 85				400 ~ 450	560 ~ 1000	3000, 5000	219
	AK,AJ	For inverter air-conditioning system, high ripple current,long life	-40 ~ 105				450	470 ~ 820	3000, 5000	220