

SERIES CHART

Green-Cap(ELECTRIC DOUBLE LAYER CAPACITORS)

EDLC (Green-Cap)				
DM21 Green-Cap Module	DP22 60°C 1000h Screw Type High Power Density	DE23 60°C 1000h Screw Type High Energy Density	DB24 70°C 1000h Snap-in Type	DS25 70°C 1000h Radial Type

ALUMINUM ELECTROLYTIC CAPACITORS

SOLID TYPES

Conductive Polymer (Hi-CAP)	
FA32 SMD Type (Vertical)	FH34 SMD Type Large Capacitance, Low ESR
FB42 Lead Type	FZ37 SMD Type 5000h Long Life
FJ40 Lead Type Large Capacitance, Low ESR	FT36 SMD Type 125°C 1000h High Temp.
FC44 SMD Type 1000h	FN39 SMD Type 4.5mmL

CHIP TYPES

85°C Product
SC49 2000h Standard
Non-Polarized
NC67 85°C 2000h, 5.5mmL Non-polarized
CN68 105°C 2000h, 5.5mmL Non-polarized

105°C Product	
RC52 5.5mmL, 1000h Standard	ZC56 5.5mmL, 1000h Low Impedance
JC54 2000h High CV	CK57 2000h Low Impedance
CB53 5.5mmL, 5000h Long Life	CD59 2000h Low Impedance
CA63 5000h Long Life, High CV	CM61 5000h Low Impedance Long Life

High Reliability
CF64 130°C High Temp.
CT65 130°C High Temp. Low Impedance
CW66 150°C High Temp.

MINIATURE RADIAL LEAD TYPES

85°C General Use
SD75 2000h Standard
SS78 7mmL, 2000h
SE79 5mmL, 2000h

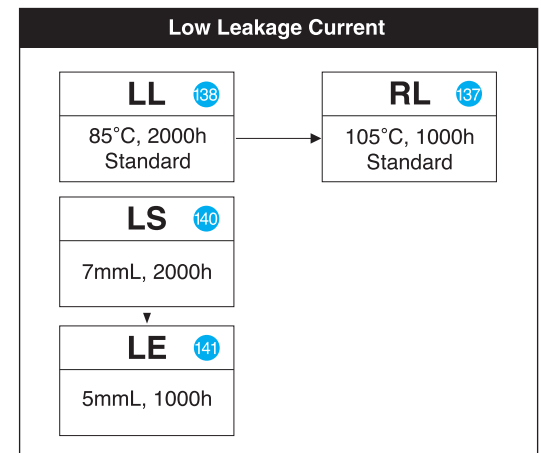
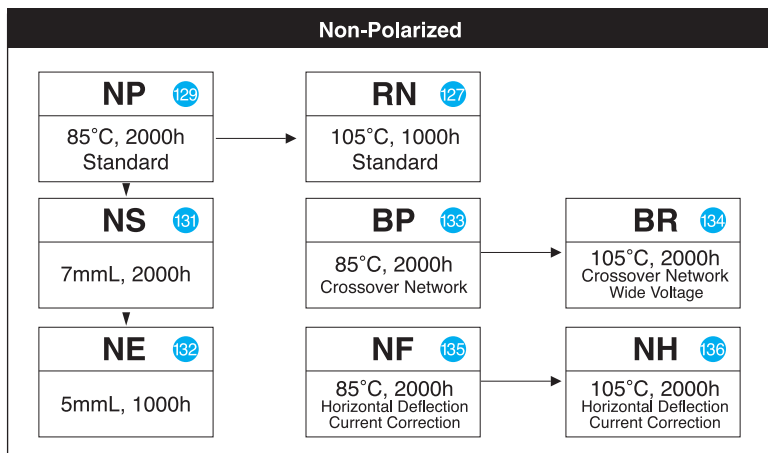
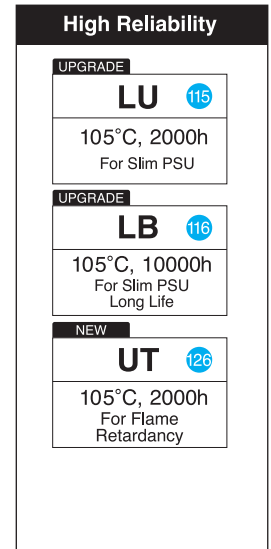
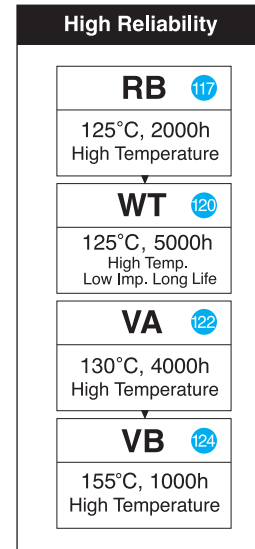
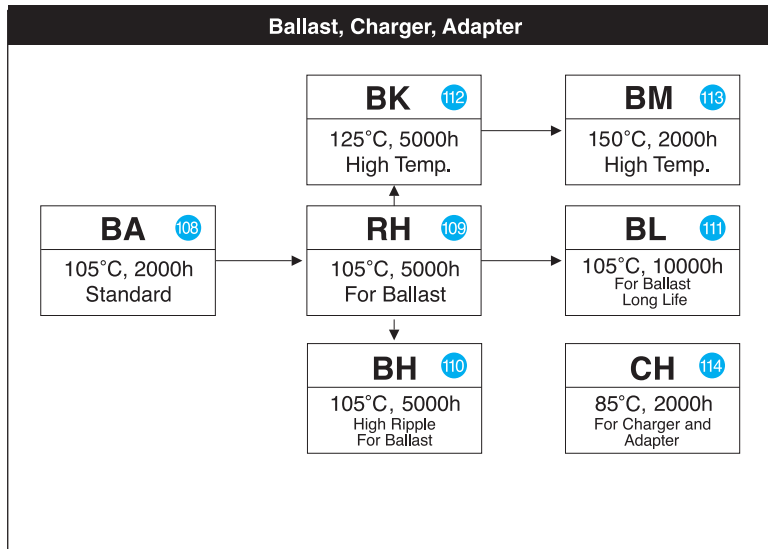
105°C General Use
RD80 2000h Standard
RM83 2000h Miniature
RK85 7mmL, 1000h
RE86 5mmL, 1000h

105°C Special Type
ZS87 7mmL, 2000h Low Imp. High Ripple
ZE88 5mmL, 2000h Low Imp. High Ripple

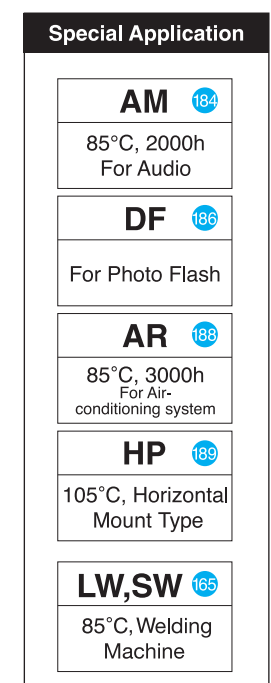
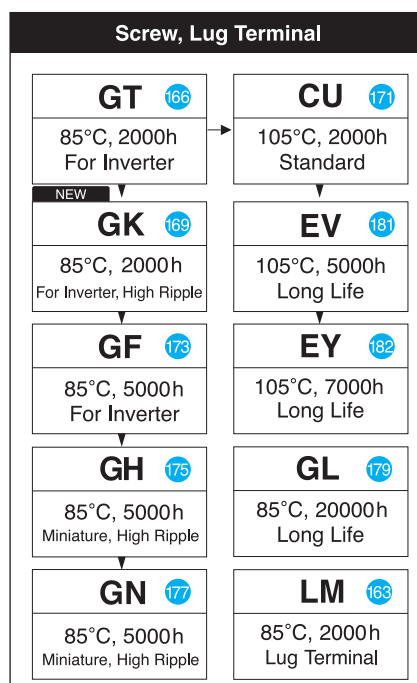
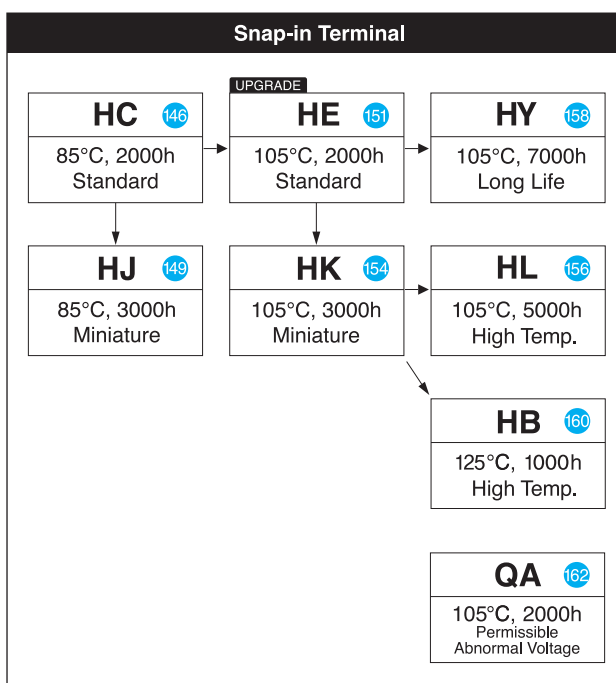
Low Impedance		
LZ104 105°C, 10000h Ultra Low Impedance Long Life	WF96 105°C, 10000h Low Impedance Long Life	RP94 105°C, 10000h Extremely Low Impedance Long Life
LK98 105°C, 5000h Ultra Low Impedance	WL91 105°C, 5000h Low Impedance Wide Voltage	RZ89 105°C, 5000h Extremely Low Impedance Standard
MK100 105°C, 5000h Ultra Low Impedance Miniature, High Ripple	MZ102 105°C, 5000h Ultra Low Impedance Miniature, High Ripple	
	ML106 105°C, 10000h Ultra Low Impedance Long Life	

■ ALUMINUM ELECTROLYTIC CAPACITORS

● MINIATURE RADIAL LEAD TYPES



● LARGE TYPES



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1 Green-Cap(Electric Double Layer Capacitors)

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☆ Upgrade series

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DM	Green-Cap Module	Green-Cap modules are supplied on custom-made basis.				21
DP	Screw type, High power density	-40 ~ 60	2.7	400 ~ 3000	1000	22
DE	Screw type, High energy density	-25 ~ 60	2.5	700 ~ 6500	1000	23
DB	Snap-in type, Standard series	-25(-40) ~ 70(60)	2.5(2.7)	100 ~ 400	1000	24
DS	Lead type, The small size and high capacitance	-25(-40) ~ 70(60)	2.5(2.7)	3 ~ 60	1000	25

2 Polymer Aluminum Electrolytic Capacitors

Series		Features	Operating Temperature Range(°C)	Voltage Range (VDC)	Capacitance Range (μF)	Load Life Time (hours)	Page
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LEAD type	FB	Lead type, with conductive polymer (Hi-CAP)	-55 ~ 105	2.5 ~ 25	6.8 ~ 3300	2000	42
	FJ	Lead type, with conductive polymer (Hi-CAP), Large Capacitance, Low ESR	-55 ~ 105	2.5 ~ 16	100 ~ 2700	2000	40
SMD	FA	Chip type, with conductive polymer (Hi-CAP)	-55 ~ 105	2.5 ~ 25	3.3 ~ 1500	2000	32
	FH	Chip type, with conductive polymer (Hi-CAP), Large Capacitance, Low ESR	-55 ~ 105	2.5 ~ 16	39 ~ 3300	2000	34
	FZ	Chip type, with conductive polymer (Hi-CAP), Long life	-55 ~ 105	4 ~ 25	10 ~ 680	5000	37
	FN	Chip type, with conductive polymer (Hi-CAP), 4.5mmL	-55 ~ 105	2.5 ~ 25	15 ~ 150	1000	39
	FT	Chip type, with conductive polymer (Hi-CAP), high temp.	-55 ~ 125	10 ~ 35	8.2 ~ 82	2000	36
	FC	Chip type, with conductive polymer (Hi-CAP)	-40 ~ 105	2 ~ 16	2.2 ~ 470	1000	44

3 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
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SMD	SC	Standard	-40 ~ 85	●		●	4 ~ 450	0.1 ~ 2200	2000	49
	NC	5.5mmL chip, non-polarized	-40 ~ 85			●	6.3 ~ 50	0.1 ~ 47	2000	67
	RC	Standard, wide temp	-55 ~ 105	●		●	6.3 ~ 50	0.1 ~ 1000	1000	52
	ZC	5.5mmL chip type, Low impedance	-55 ~ 105			●	6.3 ~ 35	1.0 ~ 100	1000	56
	JC	Chip type, wide temp, high CV	-55(-40) ~ 105			●	4 ~ 450	3.3 ~ 2200	2000	54
	CK	Chip type, Low impedance, high CV	-55 ~ 105			●	6.3 ~ 100	10 ~ 1500	2000	57
	CD	Chip type, Extremely Low Impedance	-55 ~ 105			●	6.3 ~ 50	10 ~ 1500	2000	59
	CM	Low impedance, Long life	-55 ~ 105			●	6.3 ~ 50	10 ~ 1000	3000 ~ 5000	61
	CN	5.5mmL chip, wide temp. non-polarized	-40 ~ 105			●	6.3 ~ 50	0.1 ~ 47	1000	68
	CA	Chip type, high CV, Long life	-40 ~ 105			●	6.3 ~ 50	10 ~ 1000	5000	63
	CB	Chip type, Long life	-55 ~ 105	●	●	●	4 ~ 50	0.1 ~ 100	5000	53
	CF	Chip type, high temp. for 130°C use	-40 ~ 130		●	●	10 ~ 50	22 ~ 1000	5000	64
	CT	Chip type, high temp. for 130°C use, Low Impedance	-40 ~ 130		●	●	10 ~ 50	33 ~ 470	2000	65
	CW	Chip type, high reliability	-40 ~ 150			●	10 ~ 50	33 ~ 1000	1000	66

4 Miniature 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
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General Type(85°C)	SD	Standard	-40(-25) ~ 85	●		●	6.3 ~ 500	1.0 ~ 22000	2000	75
	SS	Standard, height 7mm	-40 ~ 85		●	●	4 ~ 63	0.1 ~ 220	2000	78
	SE	Standard, height 5mm	-40 ~ 85		●	●	4 ~ 63	0.1 ~ 150	2000	79
General Type(105°C)	RD	Standard, wide temp	-55(-40,-25)~105	●		●	6.3 ~ 500	2.2 ~ 22000	1000 ~ 2000	80
	RM	Wide temp. capacitance wide range, miniature	-55(-40,-25)~105		●	●	6.3 ~ 450	2.2 ~ 22000	1000 ~ 2000	83
	RK	Wide temp. range, height 7mm	-55 ~ 105		●	●	4 ~ 63	0.1 ~ 68	1000	85
	RE	Wide temp. range, height 5mm	-55 ~ 105		●	●	4 ~ 50	0.1 ~ 220	1000	86

★ 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
Low Impedance	ZS	Height 7mmL, low impedance, high ripple	-40 ~ 105	●	●	●	6.3 ~ 50	2.2 ~ 330	2000	87
	ZE	Height 5mmL, low impedance, high ripple	-55 ~ 105	●	●	●	6.3 ~ 35	1 ~ 100	2000	88
	RZ	Extremely low impedance, high reliability	-55 ~ 105	●	●	●	6.3 ~ 63	1.0 ~ 15000	2000 ~ 5000	89
	WL ☆	Extremely low imp., miniaturized, wide voltage	-40 ~ 105	●	●	●	6.3 ~ 500	0.22 ~ 15000	2000 ~ 5000	91
	RP	Extremely low impedance, Long life	-55 ~ 105	●	●	●	6.3 ~ 50	1.0 ~ 15000	4000 ~ 10000	94
	WF	Extremely low impedance, miniaturized, Long life	-40 ~ 105	●	●	●	6.3 ~ 100	0.47 ~ 15000	5000 ~ 10000	96
	LK	Ultra low impedance	-40 ~ 105	●	●	●	6.3 ~ 100	1.0 ~ 6800	2000 ~ 5000	98
	MK ☆	Ultra low impedance, miniaturized, high ripple	-40 ~ 105	●	●	●	6.3 ~ 100	0.47 ~ 15000	2000 ~ 5000	100
	MZ ☆	Ultra low impedance, miniaturized, high ripple	-40 ~ 105	●	●	●	6.3 ~ 100	0.47 ~ 15000	2000 ~ 5000	102
	LZ	Ultra low impedance, long life	-40 ~ 105	●	●	●	6.3 ~ 50	22 ~ 8200	6000 ~ 10000	104
Ballast, Charger Adapter	ML ☆	Ultra low impedance, long life	-40 ~ 105	●	●	●	6.3 ~ 100	0.47 ~ 15000	6000 ~ 10000	106
	BA	For ballast applications, smaller case size	-40(-25) ~ 105	●	●	●	160 ~ 450	1.0 ~ 220	2000	108
	RH ☆	For ballast applications, high ripple current	-40(-25) ~ 105	●	●	●	160 ~ 450	1.0 ~ 150	5000	109
	BH	For ballast applications, high ripple current	-25 ~ 105	●	●	●	200 ~ 400	2.2 ~ 100	5000	110
	BL	For ballast applications, Long life	-25 ~ 105	●	●	●	160 ~ 450	6.8 ~ 150	10000	111
	BK	For ballast applications, high temp. for 125°C use	-25 ~ 125	●	●	●	160 ~ 400	2.2 ~ 47	5000	112
	BM	For ballast applications, high temp. for 150°C use	-25 ~ 150	●	●	●	160 ~ 400	2.2 ~ 47	2000	113
	CH	For charger, adapter	-25 ~ 85	●	●	●	400, 450	2.2 ~ 68	2000	114
	LU ☆	For slim PSU	-40(-25) ~ 105	●	●	●	250,350,450	16 ~ 150	2000	115
	LB ☆	For slim PSU, long life	-40(-25) ~ 105	●	●	●	250,350,450	16 ~ 150	5000 ~ 10000	116
High Reliability	RB	High temp. range, for 125°C use, minaturized	-55(-40) ~ 125	●	●	●	6.3 ~ 250	1.0 ~ 15000	2000	117
	WT	High temp. range, for 125°C use, Long life, low impedance	-40 ~ 125	●	●	●	6.3 ~ 50	10 ~ 3300	1000 ~ 5000	120
	VA	High temp. range, for 130°C use, low impedance	-40 ~ 130	●	●	●	10 ~ 63	1.0 ~ 220	2000 ~ 4000	122
	VB	High temp. range, for 155°C	-40 ~ 155	●	●	●	10 ~ 100	1.0 ~ 4700	1000	124
	UT ☆	For flame retardancy	-25 ~ 105	●	●	●	400,450	2.2 ~ 150	2000	126
	RN	Wide temp. range	-40 ~ 105	●	●	●	6.3 ~ 100	0.1 ~ 10000	1000	127
	NP	Standard	-40 ~ 85	●	●	●	6.3 ~ 250	0.47 ~ 10000	2000	129
	NS	Height 7mm	-40 ~ 85	●	●	●	6.3 ~ 63	0.1 ~ 47	2000	131
	NE	Height 5mm	-40 ~ 85	●	●	●	6.3 ~ 50	0.1 ~ 47	1000	132
	BP	For crossover networks	-40 ~ 85	●	●	●	25,50,100,200	1.0 ~ 100	2000	133
Non-polarize	BR	For crossover networks, wide temp	-40 ~ 105	●	●	●	200	3.3 ~ 100	2000	134
	NF	For horizontal deflection current correction	-40 ~ 85	●	●	●	25,50	1.0 ~ 10	2000	135
	NH	For horizontal deflection current correction	-55 ~ 105	●	●	●	25,50	1.0 ~ 10	2000	136
	RL	Low leakage current, wide temp. range	-55 ~ 105	●	●	●	10 ~ 50	0.1 ~ 330	1000	137
	LL	Low leakage current, standard	-40 ~ 85	●	●	●	10 ~ 100	1.0 ~ 4700	2000	138
	LS	Low leakage current, height 7mm	-40 ~ 85	●	●	●	6.3 ~ 63	0.1 ~ 100	2000	140
	LE	Low leakage current, height 5mm	-40 ~ 85	●	●	●	4 ~ 50	0.1 ~ 100	1000	141
Low Leakage										

5 Large 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
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Snap-in Terminal	HC	Standard	-40(-25) ~ 85	●	●	●	6.3 ~ 500	56 ~ 100000	2000	146
	HJ	Miniaturized	-40(-25) ~ 85	●	●	●	160 ~ 450	56 ~ 3300	3000	149
	HE ☆	Wide temp. range, standard	-40(-25) ~ 105	●	●	●	6.3 ~ 500	47 ~ 68000	2000 ~ 3000	151
	HK	Wide temp. range, miniaturized	-40(-25) ~ 105	●	●	●	160 ~ 450	47 ~ 2700	3000	154
	HL	Wide temp. range miniaturized, long life	-40(-25) ~ 105	●	●	●	160 ~ 450	47 ~ 1500	5000	156
	HY	Wide temp. range long life	-40(-25) ~ 105	●	●	●	160 ~ 450	47 ~ 1800	7000	158
	HB	High temp. range, for 125°C use	-40 ~ 125	●	●	●	10 ~ 250	100 ~ 15000	1000	160
	QA	Permissible Abnormal Voltage, snap-in terminal	-25 ~ 105	●	●	●	200, 400	47 ~ 1500	2000	162
	LM	For general use	-40(-25) ~ 85	●	●	●	16 ~ 450	68 ~ 150000	2000	163
	GT	Standard	-40(-25) ~ 85	●	●	●	16 ~ 450	180 ~ 680000	2000	166
Screw Terminal	GK ☆	High ripple current	-25 ~ 85	●	●	●	350 ~ 450	180 ~ 10000	2000	169
	CU	Wide temp. range, standard	-40(-25) ~ 105	●	●	●	16 ~ 400	220 ~ 470000	2000	171
	GF	For inverter circuits, long life	-25 ~ 85	●	●	●	350 ~ 600	1000 ~ 12000	2000 ~ 5000	173
	GH	For inverter circuits, long life, high ripple	-25 ~ 85	●	●	●	400 ~ 500	1800 ~ 12000	2000 ~ 5000	175
	GN	For inverter circuits, long life, high ripple, miniaturized	-25 ~ 85	●	●	●	400 ~ 500	1800 ~ 12000	2000 ~ 5000	177
	GL	High ripple, long life	-25 ~ 85	●	●	●	350 ~ 450	1500 ~ 12000	20000	179
	EV	For inverter circuits, long life	-25 ~ 105	●	●	●	400 ~ 500	2200 ~ 6800	2000 ~ 5000	181
	EY	For inverter circuits, long life	-25 ~ 105	●	●	●	350 ~ 450	1500 ~ 12000	7000	182
	AM	For audio equipment	-40 ~ 85	●	●	●	16 ~ 100	470 ~ 33000	2000	184
	DF	For photo flash	-20 ~ 55	●	●	●	330, 360	200 ~ 1500	-	186
Special Type	LW,SW	For Welding Machine	-25 ~ 85	●	●	●	315, 475	225 ~ 2200	-	165
	AR	For inverter Air-conditioning system	-25 ~ 85	●	●	●	-	-	-	188
	HP	Horizontal Mount type	-40(-25) ~ 105	●	●	●	200, 400	68 ~ 1000	2000	189