Jamicon Series：HB
Teapo Series：GB Long Life&Large Capacitance

■ Endurance: 105℃ 3000hours
■ Recommended Applications : Applying to switching power supply and other industry/ commercial field
■ Corresponding product to RoHS

■ SPECIFICATIONS

Item	Characteristics
Category Temperature Range	-40~+105℃
Rated Voltage Range	16 ~500VDC
Rated Capacitance Range	390 ~ 250000 μF
Capacitance Tolerance	± 20 % (120Hz , 20℃)
Leakage Current (20℃)	I = $3\sqrt{CV}$. (After rated voltage applied for 5 minutes) I：Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)

Dissipation Factor(MAX) (tan δ) (120Hz ,20℃)

WV		16	25	35	50	63		80		100	160~400	450	500
Capacitance		—	—	—	—	≦27,000	＞27,000	≦15,000	＞15,000	—	—	—	—
tan δ	35Φ	0.80	0.60	0.50	0.40	0.35	0.40	0.25	0.30	0.25	0.15	0.20	0.25
	40Φ	0.90	0.70	0.60	0.45	0.35	0.40	0.25	0.30	0.25	0.15	0.20	0.25
	45Φ	1.00	0.80	0.70	0.50	0.35	0.40	0.25	0.30	0.25	0.15	0.20	0.25
	50Φ	1.20	1.00	0.75	0.55	0.35	0.40	0.25	0.30	0.25	0.15	0.20	0.25

Low Temperature Stability Impedance Ratio (MAX)

Measurement frequency : 120Hz

WV	16~100	160~250	350~450	500
Z-25℃ / Z+20℃	4	6	8	8
Z-40℃ / Z+20℃	15	—	—	—

Endurance

After applying rated voltage with rated Ripple current for 3000hrs at 105℃,when the capacitors are restored to 20℃, the capacitor shall meet the following requirements.

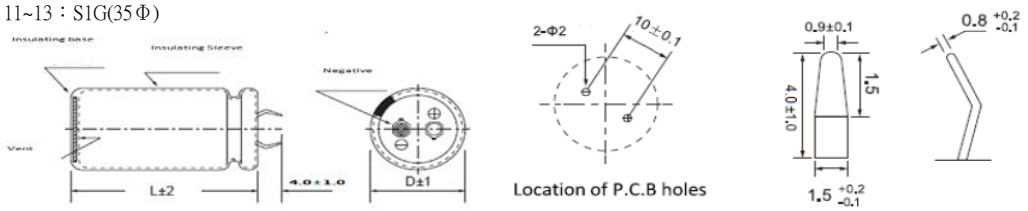
Capacitance change	Within ± 20% of initial value
D.F. (tan δ)	Not more than200% of specified value
Leakage current	initial specified value or less

Shelf Life

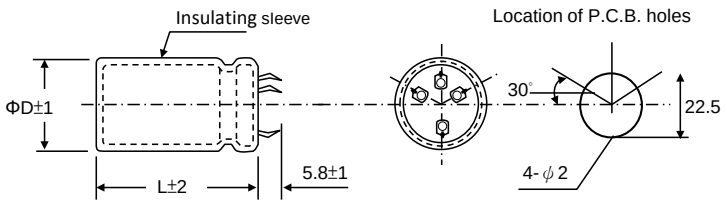
The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for1,000 hours at 105℃without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to item 4.1 of JIS C 5101-4.

■ Dimensions [mm]

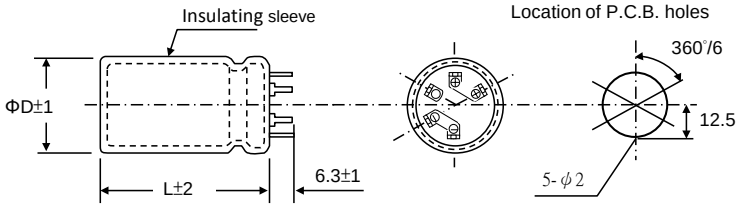
Code 11~13：S1G(35Φ)



Code 11~13：L4A(35~45Φ)



Code 11~13：L5A(50Φ)



※When the code 11~13 of part number is S1G, the terminal length of standard capacitor is 4.0±1.0mm, and when it is S1A, the terminal length of standard capacitor is 5.8±1.0mm.

■ Multiplier for Ripple Current

Freq. (Hz)	60	120	400	1K	10K
≦100V	0.80	1.00	1.10	1.20	1.20
>100V	0.80	1.00	1.10	1.30	1.40

Jamicon Series：HB
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■STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
16 (20)	68000	35x60	0.80	6.85
		40x51	0.90	7.39
	82000	35x80	0.80	8.16
		40x61	0.90	7.70
	100000	35x80	0.80	8.15
		40x71	0.90	8.67
		45x50	1.00	7.59
	120000	35x100	0.80	8.84
		40x81	0.90	9.11
		45x60	1.00	8.54
		50x50	1.20	9.23
	150000	40x101	0.90	10.07
		45x70	1.00	9.18
		50x60	1.20	10.19
	180000	45x80	1.00	10.06
		50x80	1.20	11.47
	220000	45x100	1.00	10.84
		50x90	1.20	12.01
	250000	50x100	1.20	12.67
25 (32)	39000	35x60	0.60	6.26
		40x51	0.70	6.09
	47000	35x60	0.60	6.57
		40x51	0.70	6.59
	56000	35x80	0.60	7.78
		40x61	0.70	7.22
		45x50	0.80	6.65
	68000	35x90	0.60	8.62
		40x81	0.70	9.00
		45x60	0.80	7.91
		50x50	1.00	8.57
	82000	35x100	0.60	8.94
		40x81	0.70	8.99
		45x70	0.80	8.43
		50x50	1.00	8.71
	100000	40x101	0.70	9.87
		45x80	0.80	9.86
		50x60	1.00	9.95
	120000	45x100	0.80	10x74
		50x80	1.00	11.28
	180000	50x100	1.00	12.47
35 (44)	27000	35x60	0.50	5.71
		40x51	0.60	5.70
	33000	35x70	0.50	6.46
		40x61	0.60	6.80
	39000	35x80	0.50	6.78
		40x71	0.60	7.27
		45x50	0.70	6.20
	47000	35x100	0.50	8.23
		40x81	0.60	8.09
		45x60	0.70	7.03
		50x50	0.75	8.53
	56000	40x91	0.60	8.88
		45x70	0.70	8.56
		50x60	0.75	9.31
	68000	40x101	0.60	9.28
		45x80	0.70	9.56
		50x80	0.75	11.14
	82000	45x100	0.70	11.07
		50x90	0.75	11.33
	100000	50x100	0.75	11.92
50 (63)	15000	35x60	0.40	5.17
		40x51	0.45	4.91

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
50 (63)	18000	35x60	0.40	5.44
		40x61	0.45	6.03
	22000	35x80	0.40	6.83
		40x61	0.45	5.64
	27000	35x80	0.40	6.30
		40x71	0.45	6.68
		45x60	0.50	6.30
	33000	35x100	0.40	7.33
		40x81	0.45	6.4
		45x70	0.50	7.44
		50x60	0.55	8.67
	39000	40x101	0.45	7.26
		45x80	0.50	6.62
		50x70	0.55	9.31
	47000	45x90	0.50	7.66
		50x80	0.55	9.52
	56000	45x100	0.50	8.76
		50x90	0.55	9.94
	68000	50x100	0.55	10.91
63 (79)	12000	35x60	0.35	4.74
		40x51	0.35	4.78
	15000	35x70	0.35	5.2
		40x51	0.35	4.90
	18000	35x80	0.35	6.05
		40x61	0.35	5.79
		45x50	0.35	5.70
		50x50	0.35	6.07
	22000	35x90	0.35	7.06
		40x81	0.35	7.24
		45x60	0.35	6.80
		50x60	0.35	7.23
	27000	40x91	0.35	8.07
		45x70	0.35	7.68
		50x60	0.35	7.64
	33000	40x101	0.40	7.91
		45x80	0.40	7.61
		50x80	0.40	8.08
	39000	45x100	0.40	8.66
		50x90	0.40	8.76
	47000	50x100	0.40	9.51
80 (100)	8200	35x60	0.25	4.64
		40x51	0.25	4.67
	10000	35x70	0.25	5.48
		40x61	0.25	5.57
		45x50	0.25	5.48
	12000	35x80	0.25	6.11
		40x71	0.25	6.24
		45x60	0.25	6.21
		50x50	0.25	6.13
	15000	35x100	0.25	6.91
		40x81	0.25	6.76
		45x70	0.25	6.77
		50x60	0.25	6.74
	18000	40x101	0.30	7.11
		45x80	0.30	6.83
		50x80	0.30	7.25
	22000	45x100	0.30	7.92
		50x90	0.30	8.02
	27000	50x100	0.30	8.82
100 (125)	4700	35x60	0.25	4.10
		40x51	0.25	4.13
	5600	35x70	0.25	4.62

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Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
100 (125)	5600	40x61	0.25	4.69
	6800	35x80	0.25	5.40
		40x61	0.25	5.17
		45x50	0.25	5.09
	8200	35x90	0.25	5.56
		40x81	0.25	6.18
		45x60	0.25	5.80
		50x60	0.25	6.65
	10000	35x100	0.25	6.45
		40x81	0.25	6.83
		45x70	0.25	6.84
		50x60	0.25	7.08
	12000	40x101	0.25	7.63
		45x80	0.25	7.33
		50x70	0.25	7.66
	15000	45x100	0.25	8.30
		50x60	0.25	8.34
	18000	50x100	0.25	9.24
160 (200)	2200	35x60	0.15	3.36
		40x51	0.15	3.39
	2700	35x70	0.15	3.83
		40x61	0.15	3.89
		45x50	0.15	3.83
	3300	35x80	0.15	4.32
		40x71	0.15	4.41
		45x60	0.15	4.39
		50x50	0.15	4.33
	3900	35x90	0.15	4.95
		40x81	0.15	5.08
		45x70	0.15	5.09
		50x60	0.15	5.07
	4700	35x100	0.15	5.23
		40x91	0.15	5.39
		45x80	0.15	5.43
		50x70	0.15	5.44
	5600	40x101	0.15	5.61
		45x90	0.15	5.68
		50x80	0.15	5.72
	6800	45x100	0.15	5.90
		50x90	0.15	5.97
	8200	50x100	0.15	6.11
180 (225)	1800	35x60	0.15	3.27
		40x51	0.15	3.30
	2200	35x70	0.15	3.87
		40x61	0.15	3.93
		45x50	0.15	3.88
	2700	35x80	0.15	4.39
		40x71	0.15	4.49
		45x60	0.15	4.46
		50x50	0.15	4.41
	3300	35x90	0.15	4.74
		40x81	0.15	4.87
		45x70	0.15	4.88
		50x60	0.15	4.86
	3900	35x100	0.15	5.20
		40x91	0.15	5.35
		45x80	0.15	5.40
		50x70	0.15	5.41
	4700	40x101	0.15	5.65
		45x90	0.15	5.72
		50x80	0.15	5.76
	5600	45x100	0.15	5.95

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
180 (225)	5600	50x90	0.15	6.02
	6800	50x100	0.15	6.26
200 (250)	1800	35x60	0.15	3.27
		40x51	0.15	3.06
	2200	35x80	0.15	4.11
		40x61	0.15	3.65
		45x50	0.15	3.60
	2700	35x80	0.15	4.56
		40x81	0.15	4.58
		45x60	0.15	4.3
	3300	35x90	0.15	4.93
		40x71	0.15	4.78
		45x70	0.15	5.08
		50x50	0.15	5.23
	3900	35x100	0.15	6.06
		40x81	0.15	5.51
		45x80	0.15	5.85
		50x60	0.15	5.92
	4700	40x101	0.15	6.42
		45x90	0.15	6.50
		50x80	0.15	7.07
	5600	45x100	0.15	7.44
		50x90	0.15	7.83
	6800	50x100	0.15	9.04
250 (300)	1500	35x70	0.15	3.2
	1800	35x80	0.15	3.72
		40x61	0.15	3.56
		45x50	0.15	3.50
	2200	35x80	0.15	3.97
		40x81	0.15	4.29
		45x60	0.15	4.03
		50x50	0.15	4.42
	2700	35x100	0.15	4.86
		40x81	0.15	4.76
		45x70	0.15	4.77
		50x60	0.15	5.10
	3300	40x101	0.15	5.59
		45x80	0.15	5.38
		50x70	0.15	5.81
	3900	45x90	0.15	6.16
		50x80	0.15	6.21
	4700	45x100	0.15	6.82
		50x100	0.15	7.22
350 (400)	820	35x60	0.15	2.76
		40x51	0.15	2.78
	1000	35x70	0.15	2.05
		40x61	0.15	2.08
		45x50	0.15	2.05
		50x50	0.15	3.58
	1200	35x80	0.15	3.26
		40x71	0.15	3.32
		45x60	0.15	3.32
		50x50	0.15	3.70
	1500	35x100	0.15	4.57
		40x81	0.15	3.81
		45x70	0.15	3.82
		50x60	0.15	4.19
	1800	40x101	0.15	5.24
		45x80	0.15	5.04
		50x80	0.15	5.84
	2200	45x100	0.15	6.15
		50x100	0.15	6.72

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Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
400 (450)	680	35x60	0.15	2.37
		40x51	0.15	2.39
	820	35x70	0.15	2.79
		40x61	0.15	2.83
		45x50	0.15	2.79
		50x50	0.15	3.42
	1000	35x80	0.15	3.27
		40x61	0.15	3.13
		45x60	0.15	3.32
		50x60	0.15	4.07
	1200	35x100	0.15	3.96
		40x81	0.15	3.88
		45x70	0.15	3.88
		50x60	0.15	4.45
	1500	40x101	0.15	4.79
		45x80	0.15	4.60
		50x80	0.15	5.62
	1800	45x100	0.15	5.57
		50x100	0.15	6.8
450 (500)	470	35x60	0.20	2.03
	560	35x70	0.20	2.37
		40x51	0.20	2.23
	680	35x80	0.20	2.78
		40x61	0.20	2.66
		45x50	0.20	2.62
		50x50	0.20	3.03
	820	35x90	0.20	3.22
		40x71	0.20	3.11
		45x60	0.20	3.10
		50x60	0.20	3.59
	1000	40x91	0.20	3.84

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	tan δ	Ripple current (A/rms105℃) (120Hz)
450 (500)	1000	45x70	0.20	3.65
		50x70	0.20	4.22
	1200	40x101	0.20	4.41
		45x80	0.20	4.24
		50x80	0.20	4.90
	1500	45x90	0.20	4.65
		50x90	0.20	6.12
	1800	45x100	0.20	5.24
		50x100	0.20	6.04
500(550)	390	35x60	0.25	1.60
		40x51	0.25	1.61
	470	35x70	0.25	1.88
		40x61	0.25	1.91
		45x50	0.25	1.88
	560	35x80	0.25	2.18
		40x71	0.25	2.23
		45x60	0.25	2.22
		50x50	0.25	2.32
	680	35x100	0.25	2.66
		40x81	0.25	2.60
		45x70	0.25	2.61
		50x60	0.25	2.75
	820	40x101	0.25	2.88
		45x80	0.25	3.04
		50x70	0.25	3.22
	1000	45x90	0.25	3.53
		50x80	0.25	3.77
	1200	45x100	0.25	4.06
		50x90	0.25	4.35
	1500	50x100	0.25	4.74