

GWS Screw terminal, 85°C Standard series

- Screw terminal.
- High ripple current & reliability for industrial equipments use.
- Life guaranteed 2,000 hours/85°C.



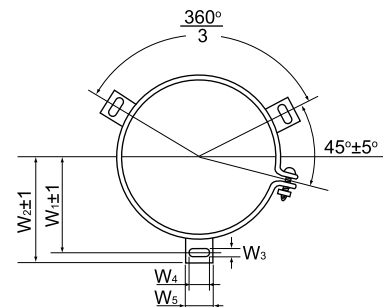
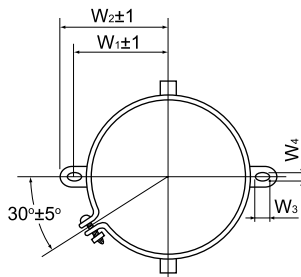
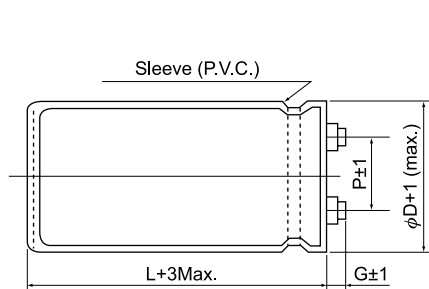
• Specifications

Item	Performance Characteristics																
Operating Temperature range	-40 + 85°C								-25 + 85°C								
Rated Voltage	6.3V ~ 100V								160V ~ 450V								
Capacitance Range	270 ~ 680,000 µF																
Capacitance Tolerance	±20% (120Hz, 20°C)																
Leakage Current	I ≤ 0.02CV or 5 mA, whichever is greater after 5 minutes application of rated voltage.																
Dissipation Factor (Tan δ) 120 Hz, 20°C	Case Dφ \ WV	6.3	10	16	25	35	50	63	80	100	160	200	250	350	400	450	
	35φ	0.75	0.75	0.60	0.40	0.30	0.25	0.20	0.20	0.15	0.15	0.15	0.15	0.20	0.20	0.20	
	51φ	1.00	1.00	0.70	0.50	0.50	0.30	0.25	0.20	0.20	0.15	0.15	0.15	0.20	0.20	0.20	
	64φ	1.30	1.30	0.80	0.70	0.60	0.50	0.30	0.25	0.25	0.20	0.20	0.20	0.25	0.25	0.25	
	77φ	1.50	1.50	1.00	0.80	0.70	0.60	0.40	0.30	0.25	0.20	0.20	0.20	0.25	0.25	0.25	
Temperature Characteristics (120 Hz)	Impedance Ratio / Stability at Low Temperature																
	Rated voltage (V)	6.3 ~ 100								160 ~ 450							
	Z (-25°C) / Z (20°C)	-----								8							
	Z (-40°C) / Z (20°C)	12								-----							
Load Life	After 2,000 hours application of WV at 85°C, capacitor shall meet the characteristics requirements mentioned below.																
	Capacitance change	Within ± 15% of initial value															
	Tan δ	≤ 175% of initial specified value															
	Leakage current	≤ Initial specified value															
Shelf Life	At 85°C, no voltage applied for 1,000 hours, the capacitor shall meet the limits as in load life.																

• Dimension (mm)

Mounting Clamp : 35φ

Mounting Clamp : 51 ~ 90φ



Dφ	W1	W2	W3	W4	W5	P	G	Bolt
35	24.0	30.0	7.0	3.5	10.0	12.7	6	M5
51	32.5	37.5	4.5	7.0	13.0	21.8	6	M5
64	38.5	42.8	4.5	7.0	13.0	28.2	6	M5
77	44.8	49.0	4.5	7.0	13.0	31.4	6	M5
90	52.3	58.8	5.0	8.0	16.0	31.4	6	M5

• Standard Products Table

Dφ x L (mm)

Cap (μF) \ WV(SV)	6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)	
10000									35 x 50	3.53
12000									35 x 50	3.87
15000									35 x 60	3.96
18000							35 x 50	3.35	35 x 60	4.34
22000					35 x 50	4.16	35 x 60	4.01	35 x 80	4.93
27000					35 x 60	4.50	35 x 80	5.04	35 x 80	5.46
33000			35 x 50	4.14	35 x 60	5.51	35 x 80	5.58	35 x 120	7.20
39000			35 x 50	4.50	35 x 80	6.80	35 x 80	6.06	35 x 120	7.83
47000	35 x 50	4.94	35 x 60	5.35	35 x 80	7.47	35 x 120	7.54	51 x 80	8.26
56000	35 x 60	4.96	35 x 80	6.63	35 x 100	9.03	35 x 120	8.23	51 x 80	9.02
68000	35 x 60	5.47	35 x 80	7.31	35 x 120	9.88	51 x 100	9.13	51 x 100	10.35
82000	35 x 80	6.82	35 x 80	8.02	35 x 120	10.85	51 x 100	10.03	51 x 100	11.36
100000	35 x 80	7.53	35 x 120	9.21	51 x 80	10.86	51 x 120	11.26	64 x 100	11.48
120000	35 x 120	9.15	51 x 80	9.23	51 x 90	11.74	51 x 120	12.33	64 x 120	13.13
150000	51 x 80	9.51	51 x 80	10.32	51 x 120	12.48	64 x 100	12.68	64 x 144	15.42
180000	51 x 80	10.42	51 x 90	11.50	51 x 120	13.67	64 x 100	13.89	64 x 144	16.89
220000	51 x 100	12.39	51 x 120	13.66	64 x 100	14.75	64 x 144	16.05	77 x 144	17.79
270000	64 x 100	13.68	51 x 120	15.13	64 x 115	17.37	77 x 115	17.80		
330000	64 x 100	15.12	64 x 120	17.25	77 x 120	18.19	77 x 144	20.38		
390000	64 x 120	16.97	64 x 120	18.75	77 x 120	19.78				
470000	64 x 120	18.63	77 x 120	19.25						
560000	77 x 120	18.80	77 x 120	21.01						
680000	77 x 120	20.71							Case size	Ripple

Cap (μF) \ WV(SV)	50 (63)		63 (75)		80 (100)		100 (125)		160 (200)	
1200									35 x 50	2.64
1500									35 x 60	3.20
1800									35 x 70	3.63
2200							35 x 50	2.15	35 x 80	4.26
2700							35 x 50	2.38	35 x 100	4.68
3300							35 x 50	2.64	35 x 120	5.22
3900							35 x 60	3.10	51 x 70	5.70
4700					35 x 50	2.72	35 x 80	3.87	51 x 70	6.26
5600			35 x 50	2.97	35 x 60	3.22	35 x 80	4.22	51 x 90	7.00
6800	35 x 50	3.26	35 x 50	3.28	35 x 80	4.03	35 x 100	5.15	51 x 90	7.72
8200	35 x 50	3.58	35 x 60	3.89	35 x 80	4.42	35 x 120	5.83	51 x 115	9.04
10000	35 x 60	4.27	35 x 80	4.77	35 x 100	5.41	51 x 80	6.03	64 x 96	10.30
12000	35 x 60	4.68	35 x 80	5.23	35 x 120	6.47	51 x 80	6.60	64 x 96	11.29
15000	35 x 80	5.94	35 x 100	5.88	51 x 80	7.63	51 x 120	8.86	64 x 130	13.83
18000	35 x 80	6.51	35 x 120	6.16	51 x 80	8.35	51 x 120	9.71	64 x 130	15.15
22000	35 x 120	6.70	51 x 80	7.73	51 x 100	8.76	64 x 100	9.79	77 x 130	18.57
27000	35 x 120	7.42	51 x 80	8.56	51 x 100	9.70	64 x 100	10.85	77 x 130	20.58
33000	51 x 80	7.55	51 x 100	8.76	64 x 100	10.22	64 x 144	12.80	90 x 130	23.90
39000	51 x 80	8.20	51 x 120	10.22	64 x 100	11.11	77 x 115	13.11	90 x 157	28.10
47000	51 x 100	9.80	64 x 100	11.88	64 x 144	14.33	77 x 144	14.81		
56000	51 x 100	10.70	64 x 100	12.96	64 x 144	15.64				
68000	64 x 100	11.34	64 x 144	13.63	77 x 144	16.27				
82000	64 x 100	12.46	77 x 130	14.82						
100000	64 x 144	12.81	77 x 144	15.86						
120000	64 x 144	14.03								
150000	77 x 144	15.86							Case size	Ripple

Allowable ripple current (A rms) at 85°C 120Hz

• Standard Products Table

Dφ x L (mm)

Cap (μF) \ WV(SV)	200 (250)		250 (300)		350 (400)		400 (450)		450 (500)	
270									35 x 50	1.45
330							35 x 80	1.97	35 x 80	1.97
390					35 x 50	1.74	35 x 80	2.14	35 x 80	2.14
470			35 x 50	1.66	35 x 80	2.35	35 x 80	2.35	35 x 80	2.35
560			35 x 50	1.81	35 x 80	2.57	35 x 80	2.57	35 x 100	2.63
680	35 x 50	1.99	35 x 50	1.99	35 x 80	2.83	35 x 100	2.90	35 x 100	2.90
820	35 x 50	2.19	35 x 60	2.37	35 x 100	3.18	35 x 100	3.18	51 x 70	3.26
1000	35 x 60	2.62	35 x 80	2.87	35 x 100	3.51	51 x 70	3.60	51 x 70	3.60
1200	35 x 60	2.87	35 x 80	3.15	51 x 70	3.94	51 x 70	3.94	51 x 90	4.39
1500	35 x 80	3.52	35 x 100	3.49	51 x 70	4.41	51 x 90	4.91	51 x 115	5.17
1800	35 x 80	3.85	35 x 100	3.83	51 x 90	5.38	51 x 90	5.38	51 x 130	5.64
2200	35 x 100	4.23	51 x 70	4.28	51 x 90	5.95	51 x 130	6.23	64 x 96	6.40
2700	35 x 120	4.72	51 x 70	4.74	51 x 130	6.91	64 x 96	7.09	64 x 115	7.25
3300	51 x 70	5.24	51 x 90	5.38	51 x 130	7.63	64 x 115	8.01	64 x 130	8.22
3900	51 x 70	5.70	51 x 115	6.23	64 x 115	8.71	64 x 130	8.94	77 x 115	9.40
4700	51 x 90	6.42	64 x 96	7.06	64 x 130	9.81	77 x 115	10.32	77 x 130	10.88
5600	51 x 115	7.47	64 x 96	7.71	77 x 115	11.26	77 x 130	11.87	77 x 155	12.83
6800	51 x 130	8.70	64 x 115	9.19	77 x 130	13.08	77 x 155	14.14	90 x 157	14.60
8200	64 x 96	9.33	64 x 115	10.09	77 x 155	15.53	90 x 157	16.03	90 x 157	16.03
10000	64 x 96	10.30	64 x 130	11.76	90 x 157	17.71	90 x 157	17.71	90 x 196	19.53
12000	77 x 96	12.56	77 x 115	13.01	90 x 157	19.40	90 x 196	21.40	90 x 236	23.28
15000	77 x 96	14.04	77 x 130	14.70	90 x 196	23.93	90 x 236	26.02		
18000	77 x 130	16.80	77 x 155	17.40	90 x 236	28.51				
22000	77 x 155	20.07	90 x 157	20.19						
27000	90 x 130	21.62								
33000	90 x 157	25.85							Case size	Ripple

Allowable ripple current (A rms) at 85°C 120Hz

• Frequency coefficient of allowable ripple current

Frequency	60 Hz	120 Hz	1 KHz	10 KHz	100 KHz
6.3 ~ 35V	0.90	1.00	1.05	1.10	1.10
50 ~ 100V	0.90	1.00	1.10	1.15	1.15
160 ~ 450V	0.80	1.00	1.20	1.40	1.40

• Allowable ripple vs. Ambient temperature

Ambient Temp. (°C)	≤ 65	75	85
Compensating Coefficient	1.80	1.60	1.00