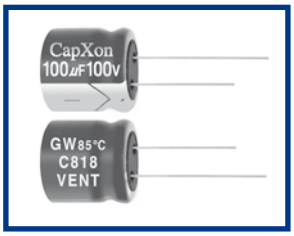
GW Series 9-25 mm height Low Profile 85℃



Features

- ◆ Miniaturized low profile.
- ◆ Height 9mm-25mm max.
- ◆ Safety vent construction design.
- ◆ For detail specifications, please refer to Engineering Bulletin No. E123
- ◆ RoHS Compliant

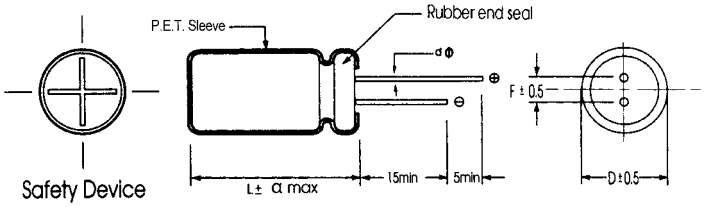
Specifications

Item	Performance Characteristics	
Operating Temperature Range	-40 to +85℃	-25 to +85℃
Rated Voltage Range	6.3 to 100 VDC	160 to 450 VDC
Capacitance Range	2.2 to 10000 μF	2.2 to 220 μF
Capacitance Tolerance	±20% (120Hz, +20℃)	
Leakage Current (+20℃,max.)	I≦0.01 CV or 3 (μA) After 2 minutes whichever is greater measured with rated working voltage applied.	I≦0.04 CV+100 (μA) After 2 minutes with rated working voltage applied.
Dissipation Factor (tan δ ，at 20℃，120Hz)	Working Voltage(VDC) 6.3 10 16 25 35 50 63 100 D.F. (%)max. 24 22 20 14 12 12 10 10 Working Voltage(VDC) 160 200 250 350 400 450 D.F. (%)max. 15 15 15 20 20 20 For capacitance ＞1000 μF, add 2% per another 1000 μF.	
Low Temperature Characteristics (at 120Hz)	Impedance ratio max Working Voltage(VDC) 6.3 10 16 25 35 50 63 100 Z-25℃／Z+20℃ 6 4 4 3 2 2 2 2 Z-40℃／Z+20℃ 12 10 8 6 4 3 3 3 Working Voltage(VDC) 160 200 250 350 400 450 Z-25℃／Z+20℃ 2 2 3 5 5 7 For Capacitance ＞1000 μF, add 0.5 per another 1000 μF for -25℃／+20℃ add 1 per another 1000 μF for -40℃／+20℃	
Load Life	Test conditions Duration time :2000Hrs Ambient temperature :+85℃ Applied voltage :Rated DC working voltage After test requirement at +20℃ Capacitance change :≦ ±20% of the initial measured value Dissipation factor :≦ 200% of the initial specified value Leakage current :≦ The initial specified value	
Shelf Life	Test conditions Duration time :1000Hrs Ambient temperature :+85℃ Applied voltage :None After test requirement at +20℃:Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.	

Multiplier for Ripple Current vs. Frequency

CAP(μF)＼Frequency(Hz)	50(60)	120	400	1K	≧10K
2.2~47 μF	0.8	1	1.20	1.30	1.50
100~1000 μF	0.8	1	1.10	1.15	1.20
2200~10000 μF	0.8	1	1.05	1.10	1.15

Diagram of Dimensions:(unit:mm)



Dϕ	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
dϕ	0.5			0.6		0.8	

Radial

Case Size

ϕ DxL(mm)

WV / Cap(μF)	6.3		10		16		25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
2.2											5x9	23	5x9	26
3.3											5x9	30	5x9	31
4.7											5x9	35	5x9	36
6.8											5x9	50	5x9	54
10											5x9	64	6.3x9	68
22											5x9	86	6.3x9	102
33									5x9	95	6.3x9	115	8x9	135
47							5x9	105	6.3x9	120	6.3x9	135	10x9	170
68					5x9	120	6.3x9	130	6.3x9	140	8x9	155	10x9	200
100	5x9	128	5x9	134	6.3x9	160	6.3x9	175	8x9	220	10x9	230	10x16	340
150	5x9	150	6.3x9	180	6.3x9	260	8x9	280	8x9	300	10x9	320	13x13	384
220	6.3x9	180	6.3x9	210	8x9	290	8x9	310	10x9	335	10x16	380	13x13	490
											13x13	400		
330	6.3x9	247	8x9	300	8x9	340	10x9	400	10x12.5	475	13x13	530	16x16	610
					10x9	355					13x16	550		
470	8x9	360	8x9	360	10x9	410	10x12.5	525	13x13	590	13x16	720	16x16	840
									13x16	650	16x16	750		
680	10x9	420	10x9	540	10x12.5	560	10x16	700	13x16	750	16x16	805	16x21	950
							13x13	730						
1000	10x9	530	10x12.5	625	13x13	750	13x16	1050	16x16	1230	16x21	1450	18x25	1600
2200	13x16	1050	13x16	1080	16x16	1150	16x21	1350	18x21	1600	18x25	1650		
							18x16	1300						
3300	16x16	1200	16x16	1350	16x16	1500	18x21	1600	18x25	1750				
					18x16	1460								
4700	16x16	1500	16x21	1550	18x21	1650	18x25	2100						
6800	16x21	1550	18x21	1850	18x25	2120								
	18x16	1600												
10000	18x21	2000	18x25	2300										

WV / Cap(μF)	100		160		200		250		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1.5													8x9	30
2.2	5x9	27									8x9	38	10x9	46
3.3	5x9	33							8x9	45	10x9	50	10x9	55
4.7	6.3x9	41	8x9	50	8x9	55	8x9	60	10x9	78	10x9	90	10x12.5	105
							10x9	52						
6.8	6.3x9	59	8x9	75	8x9	78	10x9	82	10x16	105	13x16	125	13x16	135
10	8x9	78	10x9	87	10x9	92	10x9	98	13x16	145	13x16	160	16x16	200
							10x16	120			16x16	190		
22	8x9	107	10x16	135	13x16	150	13x16	165	16x16	190	16x21	230	16x21	250
							16x16	210			18x16	225		
33	10x9	155	13x16	175	13x16	190	16x16	230	16x21	270	18x21	300	18x21	320
					16x16	200	18x16	260	18x16	335				
47	10x16	220	13x16	285	16x16	320	16x21	340	18x21	360	18x21	385	18x25	410
			16x16	325			18x16	380						
68	10x16	261	16x16	340	16x16	360	16x21	420	18x25	510	18x25	540		
	13x13	270			18x16	390								
100	13x13	410	16x21	515	16x21	575	18x21	610						
150	16x16	579	18x21	620	18x25	645	18x25	685						
220	16x21	668	18x25	840										
330	16x25	864												
470	18x25	1361												

Ripple Current (mA, rms) at 85℃ 120Hz