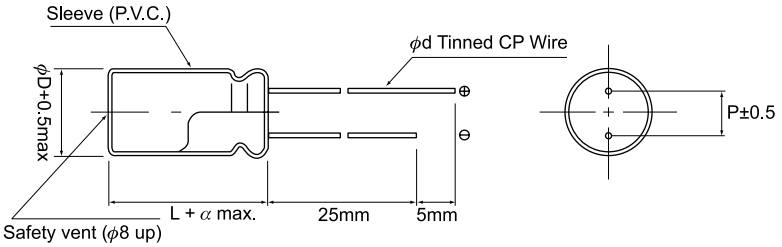
GSZ Low Impedance series

- Further lower impedance and size designed.
- Widely be used for high frequency circuit application.
- Life guaranteed 2,000 ~ 5,000 hours at 105°C.

• Specifications

Item	Performance Characteristics								
Operating Temperature range	-40 + 105°C								
Rated Voltage	6.3V ~ 100V								
Capacitance Range	6.8 ~ 6,800 μF								
Capacitance Tolerance	±20% (120Hz, 20°C)								
Leakage Current	I ≤ 0.02CV or 4 μA, whichever is greater after 2 minutes application of rated voltage.								
Dissipation Factor (120Hz, 20°C)	Rated voltage (V)	6.3	10	16	25	35	50	63	100
	Tan δ (max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	For capacitance of more than 1,000μF, add 0.02 for every increase of 1,000μF.								
Temperature Characteristics (120Hz)	Impedance Ratio / Stability at Low Temperature								
	Rated voltage (V)	6.3	10	16	25	35	50	63	100
	Z (-25°C) / Z (20°C)	2	2	2	2	2	2	2	2
	Z (-40°C) / Z (20°C)	3	3	3	3	3	3	3	3
Load Life	After a certain hour application of rated voltage and ripple current at 105°C, capacitor shall meet the characteristics requirements mentioned below. 5 ~ 6φ : 2,000 hours 8 ~ 10φ : 3,000 hours ≥ 13φ : 5,000 hours								
	Capacitance change	Within ±25% of initial value							
	Tan δ	200% or less of initial specified value							
	Leakage current	Initial specified value or less							
Shelf Life	At 105°C, no voltage applied for 1,000 hours, the capacitor shall meet the limits as in load life.								

• Dimension (mm)



Dφ	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5			0.6		0.8	
α	1.5			2.0		2.0	

• Frequency coefficient of allowable ripple current

Cap (μF) \ Frequency	120 Hz	1 KHz	10 KHz	~ 100 KHz
6.8 ~ 33	0.42	0.70	0.90	1.00
47 ~ 220	0.50	0.73	0.92	1.00
330 ~ 680	0.55	0.77	0.94	1.00
820 ~ 1800	0.60	0.80	0.96	1.00
2200 ~ 6800	0.70	0.85	0.98	1.00

• Standard Products Table

Dϕ x L (mm)

WV / Cap (μF)	6.3			10			16			25		
	Size	Imp.	Ripple	Size	Imp.	Ripple	Size	Imp.	Ripple	Size	Imp.	Ripple
47										5 x 11	0.30	250
56							5 x 11	0.30	250			
100				5 x 11	0.30	250				6 x 11	0.13	405
220				6 x 11	0.13	405				8 x 11	0.072	760
330	6 x 11	0.13	405				8 x 11	0.072	760	8 x 16	0.056	995
										10 x 12	0.053	1030
470				8 x 11	0.072	760	8 x 16	0.056	995	8 x 20	0.041	1250
							10 x 12	0.053	1030	10 x 16	0.038	1430
680				8 x 16	0.056	995	8 x 20	0.041	1250	10 x 20	0.023	1820
				10 x 12	0.053	1030	10 x 16	0.038	1430			
820	8 x 16	0.056	995							10 x 25	0.022	2150
1000	10 x 12	0.053	1030	8 x 20	0.041	1250	10 x 20	0.023	1820	13 x 20	0.021	2360
				10 x 16	0.038	1430						
1200	8 x 20	0.041	1250	10 x 20	0.023	1820	10 x 25	0.022	2150			
	10 x 16	0.038	1430									
1500	10 x 20	0.023	1820	10 x 25	0.022	2150	13 x 20	0.021	2360	13 x 25	0.018	2770
1800										13 x 30	0.016	3290
2200	10 x 25	0.022	2150	13 x 20	0.021	2360	13 x 25	0.018	2770	13 x 35	0.015	3400
2700							13 x 30	0.016	3290	16 x 25	0.016	3460
							16 x 20	0.018	3140			
3300	13 x 20	0.021	2360	13 x 25	0.018	2770	13 x 35	0.015	3400			
3900	13 x 25	0.018	2770	13 x 30	0.016	3290	16 x 25	0.016	3460			
				16 x 20	0.018	3140						
4700	13 x 30	0.016	3290	13 x 35	0.015	3400						
5600	13 x 35	0.015	3400	16 x 25	0.016	3460						
	16 x 20	0.018	3140									
6800	16 x 25	0.016	3460									

WV / Cap (μF)	35V			50V			63V			100V		
	Size	Imp.	Ripple	Size	Imp.	Ripple	Size	Imp.	Ripple	Size	Imp.	Ripple
6.8										5 x 11	1.40	125
10												
22				5 x 11	0.34	238						
33	5 x 11	0.30	250				6 x 11	0.35	265			
47										10 x 12	0.24	450
68										10 x 16	0.18	580
100				8 x 11	0.074	724				10 x 25	0.12	880
150	8 x 11	0.072	760	10 x 12	0.061	979						
220	8 x 16	0.056	995	8 x 20	0.046	1190	10 x 25	0.073	1300	13 x 30	0.063	1410
	10 x 12	0.053	1030	10 x 16	0.042	1370				16 x 20	0.071	1295
330	10 x 16	0.038	1430	10 x 25	0.028	1870	13 x 25	0.043	1850	13 x 40	0.046	1700
470	10 x 20	0.023	1820	13 x 20	0.027	2050	13 x 30	0.039	2250	16 x 36	0.033	1890
							16 x 20	0.045	1990	18 x 31	0.039	1775
560	10 x 25	0.022	2150	13 x 25	0.023	2410	13 x 35	0.033	2450	16 x 40	0.030	2080
							16 x 25	0.032	2550	18 x 36	0.031	2060
680	13 x 20	0.021	2360	13 x 30	0.021	2860	13 x 40	0.029	2780	18 x 40	0.028	2570
							18 x 20	0.038	2450			
820				13 x 35	0.019	2960	16 x 31	0.026	2810			
				16 x 20	0.023	2730	18 x 25	0.031	2780			
1000	13 x 25	0.018	2770	16 x 25	0.021	3010	16 x 36	0.021	2835			
							18 x 31	0.025	3270			
1200	13 x 30	0.016	3290				16 x 40	0.019	3340			
	16 x 20	0.018	3140				18 x 36	0.020	3310			
1500	13 x 35	0.015	3400				18 x 40	0.018	3420			
1800	16 x 25	0.016	3460									

• Impedance: (Ω) Max. 20°C 100 KHz • Allowable ripple current: (mA) at 105°C 100 KHz