

SPG – 6DI

5000Hours -40° C + 85 ° C

FEATURES

- Product primarily designed for circuit requiring large energy momentarily like those for High frequency PWM inverter & Uninterruptible Power Supply (UPS).
- This series is with high Ripple handling anode foil & high pure cathode foil and special high ripple long life electrolyte.
- Conform RoHS

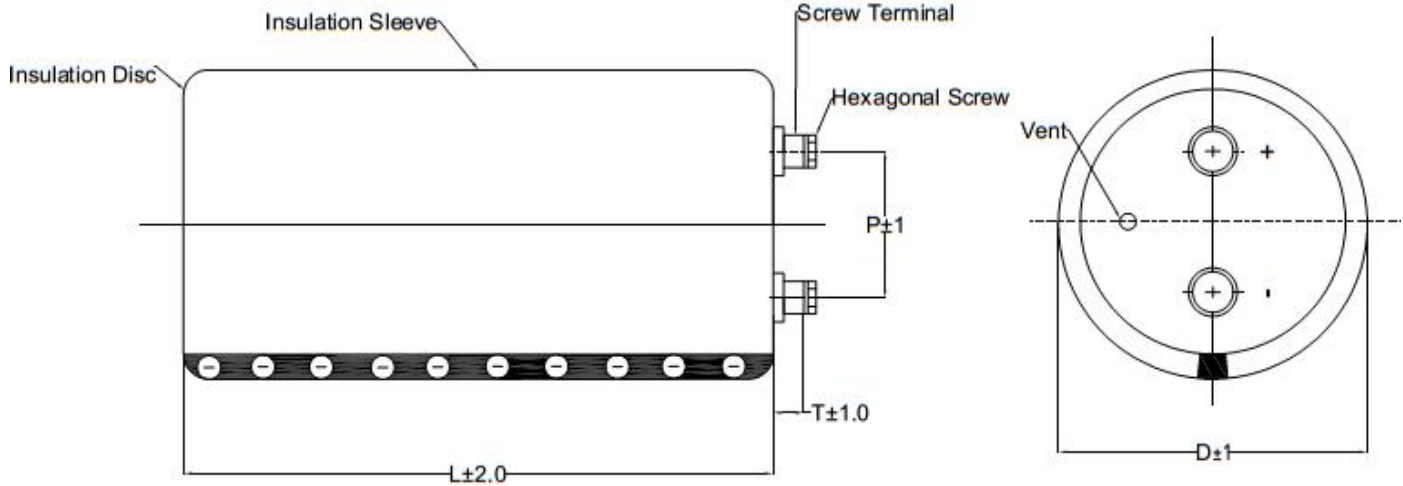
PRODUCT SPECIFICATION

ITEMS	SPECIFICATION																								
Temperature Range	-40°C to +85°C																								
Rated Voltage	50V DC to 500V DC																								
Capacitance Value	450 MFD to 150000 MFD																								
Capacitance Tolerance	±20% at 25 °C 120 Hz																								
Size	35 φ ×62L/ 76 φ ×145L																								
Series	SPG – 6DI 85° C 5000hrs Life																								
Leakage Current	0.002CV in µA or 3 mA, whichever is smaller (Charging at rated voltage for 5mins) C: Rated capacitance (µF), V: Rated voltage (V)																								
Endurance	After the rated voltage with specified ripple current is applied at 85°C 5,000 hours Capacitance change : ±20% of the initial value Dissipation factor : Less than 200% of Specified Value Leakage Current : Within specified value																								
Shelf Life	The following specification shall be meet. when the capacitor is restored to 25° C after storage of 1000 hours at 85° C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to standard. Capacitance change : ±20% of the initial value Dissipation factor : Less than 200% of Specified Value Leakage Current : Within specified value																								
Ripple Current	All capacitors withstand rms ripple current at 120 Hz at 85°C. When capacitors operate at temperatures other than 85°C, the permissible rms ripple current at 85°C should be multiplied by the factors given below : <table border="1" data-bbox="381 1539 1515 1692"> <thead> <tr> <th>Frequency (Hz)</th> <th>50</th> <th>120</th> <th>300</th> <th>1K</th> <th>≥10K</th> </tr> </thead> <tbody> <tr> <td>Correction coefficient</td> <td>0.88</td> <td>1</td> <td>1.07</td> <td>1.15</td> <td>1.20</td> </tr> <tr> <td>Temperature (° C)</td> <td>+40</td> <td>+60</td> <td>+70</td> <td>+85</td> <td></td> </tr> <tr> <td>Correction coefficient</td> <td>1.8</td> <td>1.6</td> <td>1.3</td> <td>1</td> <td></td> </tr> </tbody> </table>	Frequency (Hz)	50	120	300	1K	≥10K	Correction coefficient	0.88	1	1.07	1.15	1.20	Temperature (° C)	+40	+60	+70	+85		Correction coefficient	1.8	1.6	1.3	1	
Frequency (Hz)	50	120	300	1K	≥10K																				
Correction coefficient	0.88	1	1.07	1.15	1.20																				
Temperature (° C)	+40	+60	+70	+85																					
Correction coefficient	1.8	1.6	1.3	1																					
Standard	IEC 60384-4																								
Compliance	RoHS																								

SPG – 6DI

5000Hours -40° C + 85 ° C

DIMENSIONS

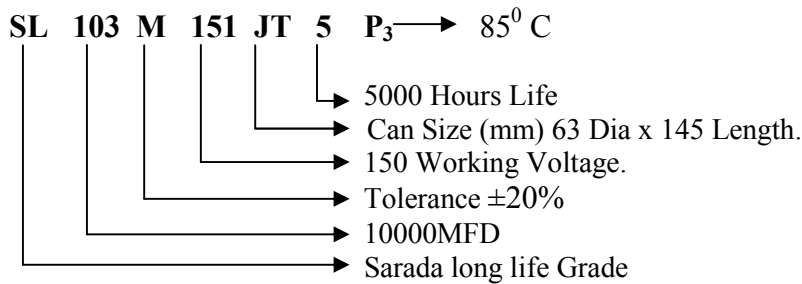


(Unit: mm)

ϕD	P	T	S
35	12	6.0	M5X10
50	22	6.0	M5X10
63	28	6.0	M5X10
76	32	6.0	M5X10

PRODUCT CODE

Product code Example : SPG -6DI series 10000mfd/150V.DC



SPG – 6DI

5000Hours -40° C + 85 ° C

STANDARD CAPACITOR VALUES

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	MAX ESR at 120 Hz, 25°C (Ohms)	Impedance at 120 Hz, 25°C (Ohms)	Ripple at 120 Hz, 105°C (Amps)	Can size Nominal D x L mm		
50	60	4700	0.079	0.338	4.61	35x62		
		5000	0.071	0.311	4.41	35x62		
		6800	0.059	0.230	4.61	35x62		
		10000	0.045	0.162	6.22	35x82		
		10000	0.051	0.162	7.23	50x84		
		15000	0.028	0.107	9.81	50x84		
		22000	0.020	0.073	11.71	50x84		
		27000	0.015	0.060	13.21	50x105		
		33000	0.013	0.049	16.22	50x105		
		47000	0.011	0.034	19.51	63x105		
		68000	0.012	0.025	21.43	76x105		
		82000	0.010	0.021	22.61	76x121		
		100000	0.009	0.014	24.31	76x121		
150000	0.008	0.011	28.12	76x145				
63	78	4700	0.062	0.339	4.91	35x62		
		5000	0.049	0.320	5.42	35x62		
		6800	0.041	0.234	6.72	35x82		
		10000	0.031	0.159	7.71	35x82		
		10000	0.029	0.160	9.39	50x84		
		15000	0.024	0.106	10.50	50x84		
		22000	0.019	0.073	13.26	50x105		
		27000	0.016	0.060	14.30	50x105		
		33000	0.015	0.050	16.31	63x105		
		47000	0.013	0.035	19.91	76x105		
		68000	0.012	0.024	22.31	76x121		
		82000	0.010	0.020	23.51	76x121		
		100000	0.010	0.017	26.45	76x145		
75	90	4700	0.043	0.341	6.34	35x82		
		5000	0.039	0.317	8.53	35x82		
		6800	0.026	0.233	9.71	50x84		
		10000	0.024	0.159	10.79	50x84		
		10000	0.023	0.158	12.44	50x105		
		15000	0.019	0.103	14.26	50x105		
		22000	0.016	0.072	17.46	63x105		
		27000	0.015	0.059	18.05	63x105		
		33000	0.013	0.049	20.80	76x105		
		47000	0.012	0.034	21.96	76x121		
		68000	0.011	0.024	24.34	76x145		
		100	125	2200	0.099	0.721	4.25	35x62
				2500	0.089	0.628	4.90	35x82
3300	0.089			0.486	5.29	35x82		
4700	0.030			0.332	8.93	35x82		
5000	0.029			0.311	9.80	50x84		
6800	0.033			0.236	10.14	50x84		
10000	0.018			0.157	13.72	50x105		

SPG – 6DI**5000Hours -40° C + 85 ° C**

		15000	0.017	0.107	15.95	63x105
		20000	0.016	0.080	17.85	63x121
		22000	0.014	0.073	19.25	76x105
		27000	0.013	0.059	20.80	76x105
		33000	0.009	0.049	24.94	76x121
		47000	0.008	0.034	28.41	76x145
150	180	1000	0.190	1.589	3.79	35x105
		2000	0.068	0.798	6.05	50x84
		2200	0.060	0.725	7.19	50x84
		2500	0.058	0.638	8.22	50x105
		3300	0.050	0.484	9.20	63x105
		4700	0.040	0.340	11.22	63x105
		5000	0.029	0.319	11.84	63x105
		6800	0.027	0.235	13.10	63x105
		10000	0.015	0.156	17.50	63x145
		12000	0.015	0.133	21.64	76x145
		15000	0.014	0.107	22.50	76x145
		20000	0.013	0.080	23.77	76x145
		22000	0.013	0.073	26.51	76x145
200	240	1000	0.143	1.595	4.10	35x82
		1500	0.119	1.065	4.85	35x105
		2200	0.047	0.720	7.60	50x105
		3300	0.038	0.483	10.50	63x105
		4700	0.029	0.340	11.93	63x121
		5000	0.024	0.319	12.96	63x121
		5600	0.022	0.285	13.95	63x121
		6800	0.018	0.235	16.21	76x121
		8200	0.017	0.195	17.40	76x121
		10000	0.015	0.160	21.89	76x145
250	300	470	0.311	3.387	2.41	35x62
		680	0.174	2.331	3.91	35x82
		1000	0.140	1.596	4.81	50x82
		2000	0.066	0.797	7.04	50x105
		2200	0.051	0.720	8.45	50x105
		2500	0.042	0.629	9.90	63x105
		3300	0.040	0.471	10.58	63x105
		4700	0.035	0.320	12.00	63x121
		5000	0.030	0.311	13.10	63x121
		5600	0.021	0.278	14.75	63x121
		6800	0.016	0.230	19.81	76x145
		8200	0.015	0.190	20.80	76x145
		10000	0.012	0.140	22.61	76x145
315	370	2200	0.058	0.725	8.91	63x105
		3300	0.050	0.480	9.70	76x121
		4700	0.037	0.340	12.10	76x121
		5000	0.035	0.319	13.10	76x121
		5600	0.029	0.285	14.90	76x145
		6800	0.021	0.231	17.10	76x145
350	400	330	0.399	4.821	2.22	35x82
		1000	0.120	1.594	5.15	50x105

SPG – 6DI

5000Hours -40° C + 85 ° C

		1500	0.098	1.624	6.50	63x105
		2200	0.050	0.720	9.37	63x121
		3300	0.042	0.483	10.89	63x121
		3300	0.038	0.480	11.93	76x121
		4700	0.030	0.332	14.80	76x145
		5000	0.021	0.313	15.93	76x145
		5600	0.019	0.281	16.15	76x145
		6800	0.018	0.230	17.44	76x145
400	460	680	0.221	2.346	4.11	50x84
		1000	0.114	1.594	5.36	50x105
		1000	0.110	1.580	6.81	63x105
		1500	0.091	1.051	7.32	63x105
		2200	0.060	0.720	9.11	63x121
		3300	0.048	0.480	10.39	76x121
		4700	0.032	0.338	12.94	76x145
		5000	0.034	0.312	13.81	76x145
		5600	0.033	0.285	14.11	76x145
450	500	470	0.311	3.400	2.95	50x84
		680	0.128	2.341	5.91	50x105
		1000	0.111	1.594	6.81	63x105
		1500	0.093	1.059	6.82	63x121
		2200	0.063	0.721	8.87	63x121
		3300	0.048	0.481	12.20	76x145
		4700	0.030	0.333	14.31	76x145
		5000	0.028	0.310	15.52	76x145
		5600	0.025	0.281	15.91	76x145
500	550	820	0.151	1.944	4.95	50x105
		1000	0.132	1.591	6.23	50x105
		1500	0.099	1.063	8.02	63x105
		2200	0.059	0.722	9.44	76x105
		3300	0.050	0.483	13.10	76x145