

SPGI

3000Hours -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 electrolyte.
- Conform RoHS

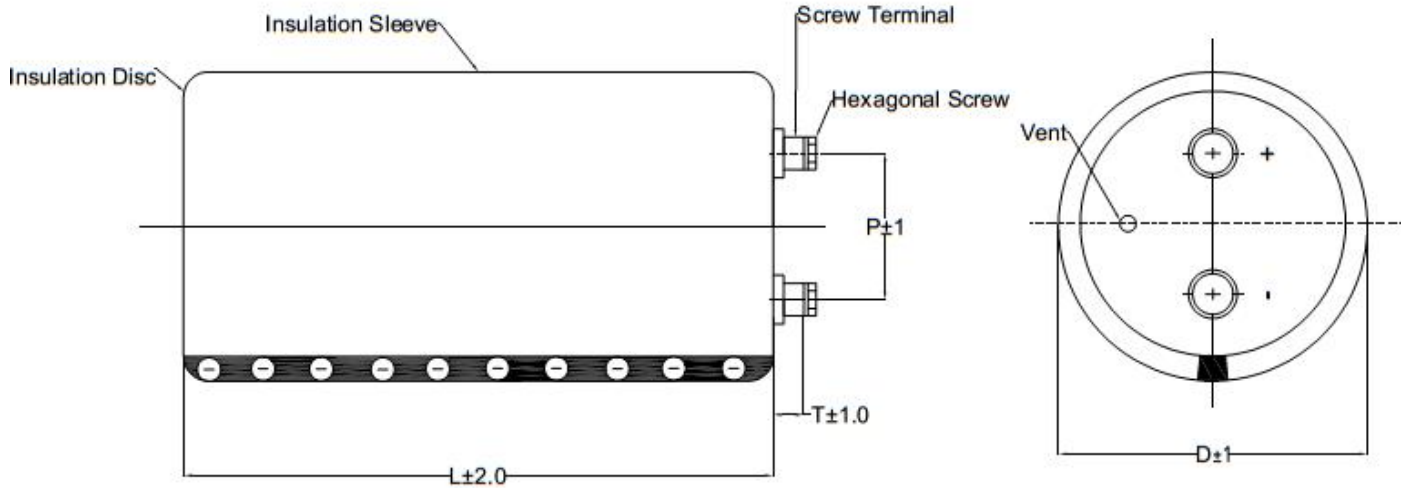
PRODUCT SPECIFICATION

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	SPGI 85° C 3000hrs Life																								
Leakage Current	0.003CV 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 3,000 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 1543 1518 1696"> <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	
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Standard	IEC 60384-4																								
Compliance	RoHS																								

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DIMENSIONS

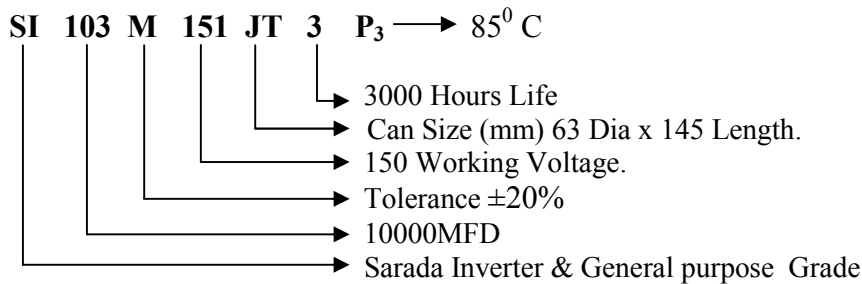


(Unit: mm)

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 : SPGI series 10000mfd/150V.DC



SPGI**3000Hours -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	0.080	0.340	4.30	35x62		
		5000	0.077	0.320	4.40	35x62		
		6800	0.062	0.233	4.68	35x62		
		10000	0.047	0.162	6.05	35x82		
		10000	0.051	0.162	7.26	50x84		
		15000	0.022	0.107	9.70	35x105		
		22000	0.020	0.073	11.66	50x84		
		27000	0.016	0.060	13.11	50x84		
		33000	0.012	0.049	16.24	50x105		
		47000	0.011	0.035	19.67	63x105		
		68000	0.012	0.025	21.45	76x105		
		82000	0.011	0.021	22.55	76x121		
		100000	0.009	0.015	23.96	76x121		
150000	0.009	0.012	27.32	76x145				
63	78	4700	0.065	0.341	4.84	35x62		
		5000	0.052	0.320	5.39	35x62		
		6800	0.039	0.235	6.60	35x82		
		10000	0.029	0.160	7.70	35x82		
		10000	0.031	0.160	9.35	50x84		
		15000	0.024	0.107	10.60	50x84		
		22000	0.019	0.073	13.26	50x105		
		27000	0.016	0.060	14.30	50x105		
		33000	0.017	0.049	16.06	63x105		
		47000	0.014	0.035	19.81	76x105		
		68000	0.011	0.024	22.31	76x121		
		82000	0.010	0.020	23.10	76x121		
		100000	0.010	0.017	26.05	76x145		
75	90	4700	0.043	0.340	6.34	35x82		
		5000	0.040	0.319	5.53	35x82		
		6800	0.026	0.235	9.09	35x105		
		10000	0.023	0.160	10.79	50x84		
		10000	0.025	0.160	11.44	50x105		
		15000	0.019	0.107	13.26	50x105		
		22000	0.016	0.073	16.46	63x105		
		27000	0.015	0.060	17.05	63x105		
		33000	0.014	0.049	19.80	76x105		
		47000	0.012	0.035	20.96	76x121		
		68000	0.011	0.024	24.24	76x145		
		100	125	2200	0.101	0.723	3.90	35x62
				2500	0.090	0.638	4.31	35x82
3300	0.093			0.486	4.29	35x82		
4700	0.036			0.340	6.93	35x82		
5000	0.035			0.317	8.80	50x84		
6800	0.041			0.236	8.14	50x84		

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		10000	0.019	0.158	13.46	50x105
		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	0.014	0.060	19.80	76x105
		33000	0.009	0.049	24.94	76x121
		47000	0.008	0.034	28.31	76x145
150	180	1000	0.198	1.591	3.39	35x105
		2000	0.071	0.798	6.05	50x84
		2200	0.071	0.725	6.30	50x84
		2500	0.061	0.638	7.50	50x105
		3300	0.069	0.484	9.10	63x105
		4700	0.041	0.340	11.12	63x105
		5000	0.038	0.319	11.63	63x105
		6800	0.029	0.235	12.10	63x105
		10000	0.016	0.159	16.80	63x145
		12000	0.016	0.133	20.84	76x145
		15000	0.015	0.107	21.64	76x145
		20000	0.013	0.080	22.87	76x145
		22000	0.013	0.073	25.91	76x145
200	240	1000	0.150	1.595	3.80	35x82
		1500	0.141	1.065	4.15	35x105
		2200	0.057	0.725	7.40	50x105
		3300	0.040	0.483	9.60	63x105
		4700	0.036	0.340	11.33	63x121
		5000	0.030	0.319	12.26	63x121
		5600	0.029	0.285	12.85	63x121
		6800	0.019	0.235	15.91	76x121
		8200	0.018	0.195	16.60	76x121
		10000	0.016	0.160	20.69	76x145
250	300	470	0.320	3.391	2.30	35x62
		680	0.180	2.340	3.41	35x82
		1000	0.145	1.597	4.50	50x82
		2000	0.066	0.797	7.04	50x105
		2200	0.058	0.725	8.45	50x105
		2500	0.047	0.636	9.62	63x105
		3300	0.041	0.480	10.10	63x105
		4700	0.039	0.331	11.21	63x121
		5000	0.034	0.319	12.10	63x121
		5600	0.029	0.281	12.95	63x121
		6800	0.017	0.232	19.26	76x145
		8200	0.016	0.193	20.00	76x145
		10000	0.014	0.150	21.54	76x145
315	370	2200	0.061	0.729	8.50	63x105
		3300	0.058	0.483	9.10	76x121
		4700	0.041	0.345	12.10	76x121
		5000	0.035	0.319	12.40	76x121
		5600	0.030	0.285	13.30	76x145
		6800	0.024	0.237	16.90	76x145

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350	400	330	0.409	4.832	2.06	35x82
		1000	0.131	1.599	4.91	50x105
		1500	0.102	1.630	6.50	63x105
		2200	0.056	0.725	9.12	63x121
		3300	0.042	0.483	10.89	63x121
		3300	0.041	0.483	11.44	76x121
		4700	0.034	0.332	13.99	76x145
		5000	0.026	0.313	15.51	76x145
		5600	0.025	0.285	15.90	76x145
		6800	0.021	0.235	17.20	76x145
400	440	680	0.227	2.350	3.51	50x84
		1000	0.114	1.594	5.36	50x105
		1000	0.120	1.592	6.12	63x105
		1500	0.110	1.061	6.41	63x105
		2200	0.063	0.725	8.61	63x121
		3300	0.050	0.485	10.11	76x121
		4700	0.040	0.340	12.61	76x145
		5000	0.038	0.319	13.07	76x145
		5600	0.037	0.287	13.37	76x145
450	500	470	0.321	3.412	2.95	50x84
		680	0.130	2.343	5.01	50x105
		1000	0.115	1.594	6.10	63x105
		1500	0.102	1.061	6.61	63x121
		2200	0.078	0.721	7.87	63x121
		3300	0.052	0.484	11.20	76x145
		4700	0.033	0.337	14.11	76x145
		5000	0.031	0.319	14.61	76x145
		5600	0.029	0.286	15.31	76x145
500	550	820	0.154	1.944	4.7	50x105
		1000	0.138	1.595	5.23	50x105
		1500	0.101	1.064	7.02	63x105
		2200	0.063	0.725	9.44	76x105
		3300	0.051	0.484	12.10	76x145