

# STG Series

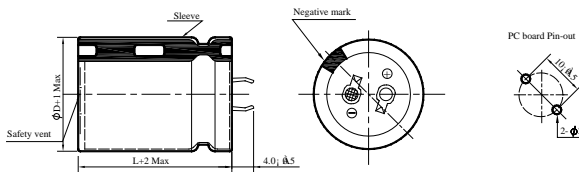
- Load life 5,000 hours at 125 °C.
- High ripple current, High reliability

## SPECIFICATIONS

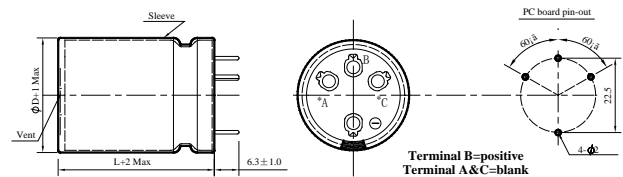
Item	Performance Characteristics																		
Category Temperature Range	-40 ~ +125°C																		
Working Voltage Range	10 ~ 100Vdc																		
Capacitance Range	680 ~ 47,000μF																		
Capacitance Tolerance	±20% (at 25°C and 120Hz)																		
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.35</td> <td>0.35</td> <td>0.35</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> </tr> </table> <p>The above values should be increased by 0.02 for every additional 1000μF</p>	Rated Voltage (V)	10	16	25	35	50	63	80	100	tanδ(Max)	0.35	0.35	0.35	0.25	0.25	0.25	0.20	0.15
Rated Voltage (V)	10	16	25	35	50	63	80	100											
tanδ(Max)	0.35	0.35	0.35	0.25	0.25	0.25	0.20	0.15											
Leakage Current	<p><math>I=0.02CV</math> or <math>3000\mu A</math>, whichever is smaller</p> <p>I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V)</p> <p>Impress the rated voltage for 5 minutes.</p>																		
Endurance	<p>The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 5,000 hours at 125°C.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ specified value												
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Dissipation factor(tanδ)	≒ 200% of the specified value																		
Leakage current	≒ specified value																		
Shelf Life	<p>The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 125°C without voltage applied.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ 200% of the specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ 200% of the specified value												
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Leakage current	≒ 200% of the specified value																		
Others	Conforms to JIS-C-5101-4 (1998), characteristic W.																		

## DIMENSIONS (mm)

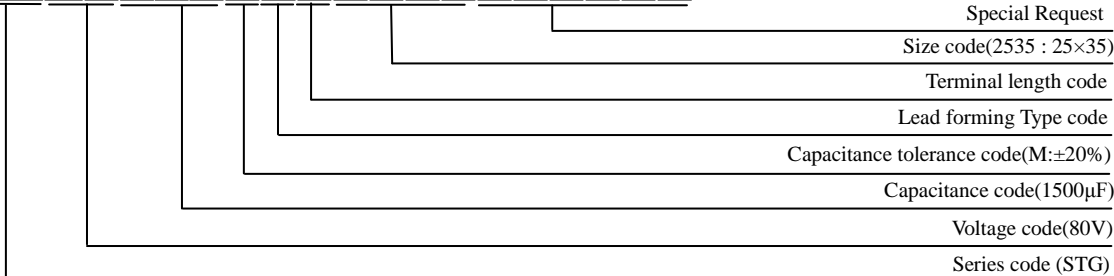
Terminal Code : ND : Standard



Terminal Code :K6 (ø35)



## PART NUMBERING SYSTEM (Example : 80V 1500μF)



# STG Series

◆ Case size & Permissible rated ripple current (mA rms) at 125 °C/100Hz:

Vdc ΦD uF	10								Vdc ΦD uF	16							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
6800	22×25	1140							5600	22×25	1200						
8200	22×30	1220	25×25	1220					6800	22×30	1340	25×25	1340				
10000	22×35	1445	25×30	1445					8200	22×35	1470	25×30	1470	30×25	1470		
12000	22×40	1660	25×35	1660	30×25	1660			10000	22×40	1700	25×35	1700	30×30	1700		
15000	22×45	1910	25×40	1910	30×30	1910			12000	22×45	1930	25×40	1930	30×35	1930		
18000	22×50	2140	25×45	2140	30×35	2140	35×25	2140	15000	22×50	2250	25×45	2250	30×40	2250	35×25	2250
22000			25×50	2510	30×40	2510	35×30	2510	18000			25×50	2580	30×45	2580	35×30	2580
27000					30×45	2800	35×35	2800	22000					30×50	2990	35×35	2990
33000					30×50	3185	35×40	3185	27000							35×40	3293
39000							35×45	3570	33000							35×45	3750
47000							35×50	3900	39000							35×50	4200

Vdc ΦD uF	25								Vdc ΦD uF	35							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
3900	22×25	1150							2700	22×25	1085						
4700	22×30	1280	25×25	1280					3300	22×30	1200						
5600	22×35	1390	25×30	1390					3900	22×35	1365	25×25	1365				
6800	22×40	1590	25×35	1590					4700	22×40	1470	25×30	1470	30×25	1470		
8200	22×45	1800	25×40	1800	30×25	1800			5600	22×45	1700	25×35	1700	30×30	1700		
10000	22×50	2045	25×45	2045	30×30	2045	35×25	2045	6800	22×50	1880	25×40	1880	30×35	1880	35×25	1880
12000			25×50	2340	30×35	2340	35×30	2340	8200			25×45	2350	30×40	2350	35×30	2350
15000					30×40	2750	35×35	2750	10000			25×50	2510	30×45	2510	35×35	2510
18000					30×45	3025	35×40	3025	12000					30×50	2830	35×40	2830
22000					30×50	3420	35×45	3420	15000							35×45	3250
27000							35×50	4040	18000							35×50	3820

Vdc ΦD uF	50								Vdc ΦD uF	63							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
1500	22×25	1030							1000	22×25	950						
1800	22×30	1170	25×25	1170					1200	22×30	1030						
2200	22×35	1440	25×30	1440					1500	22×35	1050	25×25	1050				
3300	22×40	1665	25×35	1665	30×25	1665			1800	22×40	1320	25×30	1320				
3900	22×45	1860	25×35	1860	30×30	1860			2200	22×45	1515	25×35	1515	30×25	1515		
4700	22×50	2150	25×40	2150	30×35	2150	35×25	2150	2700	22×50	1740	25×40	1740	30×30	1740		
5600			25×50	2330	30×40	2330	35×30	2330	3300			25×45	1980	30×35	1980	35×25	1980
6800					30×45	2820	35×35	2820	3900			25×50	2200	30×40	2200	35×30	2200
8200					30×50	3080	35×40	3080	4700					30×45	1980	35×35	1980
10000							35×45	3450	5600					30×50	2200	35×40	2200
12000							35×50	3930	6800							35×45	3155
									8200							35×50	3400

# STG Series

◆ Case size & Permissible rated ripple current (mA rms) at 125°C / 120Hz:

Vdc ΦD uF	80								Vdc ΦD uF	100							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
820	22×25	945							680	22×25	1030						
1000	22×30	1050	25×25	1050					820	22×30	1145	25×25	1145				
1200	22×35	1200	25×30	1200					1000	22×35	1280	25×30	1280				
1500	22×40	1380	25×35	1380	30×25	1380			1200	22×40	1460	25×35	1460	30×25	1460		
1800	22×45	1555	25×40	1555	30×30	1555			1500	22×45	1700	25×40	1700	30×30	1700		
2200	22×50	1790	25×45	1790	30×35	1790	35×25	1790	1800	22×50	1900	25×45	1900	30×35	1900	35×25	1900
2700			25×50	2040	30×40	2040	35×30	2040	2200			25×50	2300	30×40	2300	35×30	2300
3300					30×45	2320	35×35	2320	2700					30×45	2460	35×35	2460
3900					30×50	2650	35×40	2650	3300					30×50	2800	35×40	2800
4700							35×45	2930	3900							35×45	3140
5600							35×50	3290	4700							35×50	3250

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50	120	1K	10K	≥50K
10 ~ 100	0.95	1.00	1.05	1.08	1.08