

TG 系列 SERIES



- 全焊结构，确保可靠的电气接触性
All-welded construction ensures reliable electrical contact
- 高可靠性及高耐纹波电流能力
High reliability and high ripple current capability.
- 保证 85℃、10000 小时寿命（叠加纹波电流）
Endurance with ripple current: 10000 hours at 85℃
- 应用：变频器、不间断电源、专业电源、太阳能和风力发电设备
Applications: Frequency converters, Uninterruptible power supplies, Professional power supplies, Solar and wind power generator



规格表 SPECIFICATIONS

项目 Items	特性 Characteristics										
工作温度范围 Operating Temperature Range	-40~+85℃										
额定工作电压范围 Rated Working Voltage Range	350~500V										
静电容量范围 Capacitance Range	1000~18000 μF										
静电容量允许偏差 Capacitance Tolerance	±20% (20℃, 120Hz)										
损耗角正切值 Dissipation Factor (MAX) 20℃, 120Hz	<table border="1"> <tr> <td>U_R(V)</td> <td>350</td> <td>400</td> <td>450</td> <td>500</td> </tr> <tr> <td>tanδ</td> <td colspan="4">0.15</td> </tr> </table>	U _R (V)	350	400	450	500	tanδ	0.15			
U _R (V)	350	400	450	500							
tanδ	0.15										
漏电流 Leakage Current (MAX)	$I = 0.01C_R U_R$ 或 5mA 取小者 (20℃, 施加额定电压 5 分钟后) $I = 0.01C_R U_R$ or 5mA whichever is minimum. (at 20℃, After 5 minutes application of rated voltage) I=漏电流 (μA) U _R =额定电压 (V) C _R =静电容量 (μF) Leakage Current Rated Voltage Rated Capacitance										

	使用寿命 Useful Life	负荷寿命 Load Life	耐久性特性 Endurance Test	高温无负荷特性 Shelf Life
产品寿命 Life time	15000h	>250000h	12000h	1000h
漏电流 Leakage current	≤规定值 ≤ Specified value	≤规定值 ≤ Specified value	≤规定值 ≤ Specified value	≤规定值 ≤ Specified value
损耗角正切值变化率 tanδ Change	≤规定值的 300% ≤ 300% of specified value	≤规定值的 200% ≤ 200% of specified value	≤规定值的 130% ≤ 130% of specified value	≤规定值的 150% ≤ 150% of specified value
静电容量变化率 Capacitance change	初始值±30%以内 Within ±30% of initial value	初始值±20%以内 Within ±20% of initial value	初始值±10%以内 Within ±10% of initial value	初始值±15%以内 Within ±15% of initial value
施加条件 Condition 施加电压 Applied Voltage 施加纹波电流 Applied Ripple Current 环境温度 Applied Temperature 失效等级 Failure Rate Level	U_R I_R 85℃ ≤1% Failure rate	U_R $1.2 \times I_R$ 40℃ ≤1% Failure rate	U_R $I_R=0$ 85℃ 0%	$U_R=0$ $I_R=0$ 85℃ 0% Back up to 20℃ and placed more than 24 hours. U _R to be applied for 60 min before measurement.

尺寸图 Dimensions

- 常用端子型式代码：Terminal Code

L-Type: Small terminal M5 thread

S-Type: Large terminal M6 thread

Ring Clip: T (Φ35 Standard)

Ring Clip: S (Φ51-Φ89 Standard)

Ring Clip Dimensions:

ΦD	A	B	a	b
51	73.0	63.5	4.5	7
64	85.1	76.2	4.5	7
76	98.4	88.9	4.5	7
89	111.1	101.6	4.5	7

产品详细尺寸和公差请参照 P130
For detailed dimension & tolerance, please refer to P130

- 记载以外的端子形状，请另行咨询。Please consult to us for the terminal type not displayed in content.

产品编码体系 PART NUMBER SYSTEM

●例如：Example TG 450V2700μF Φ64×130 ±20%

T G E 2 7 2 M 6 4 1 3 0 L V A

客户特殊要求 special requirement
 套管材质代码 Sleeve Code
 端子型式代码 Lead Form Code
 高度代码 (例: 130→130) The height of the code (mm)
 直径代码 (例: 64→64, 76→76) Diameter code (mm)
 容差代码 (例: ±20%→M) Capacitance Tolerance code
 容量代码 (例: 2700→272, 12000→123) Capacitance Code (μF)
 电压代码 (例: 450V→E, 500V→C) Rated Voltage Code (V)
 产品系列代码 (例: TG→TG) Series Code

纹波电流修正系数 Rated Ripple Current Multiplies

●频率修正系数 Frequency coefficient

频率 Frequency (Hz)	50(60)	100(120)	300	1k	≥10k
系数 Coefficient	0.80	1.00	1.10	1.30	1.40

●温度修正系数 Temperature coefficient

温度 Temperature (℃)	+40	+60	+85
系数 Coefficient	1.89	1.67	1.00

◆ 产品一览表 Standard Ratings

WV _{DC} (Surge Voltage) (V)	Cap (μ F)	Size D×L (mm)	tan δ 20°C 120Hz	ESR _{typ} 20°C 120Hz m Ω	Ripple Current 85°C 120Hz (Arms)	Catalog Part Number
350 (400)	1500	51×95	0.15	64.6	5.2	TGH152M51095□VA
	1800	51×95	0.15	53.8	5.7	TGH182M51095□VA
	2200	51×115	0.15	44.0	7.0	TGH222M51115□VA
	2700	51×130	0.15	35.9	8.4	TGH272M51130□VA
	3300	51×150	0.15	29.4	9.9	TGH332M51150□VA
	3900	64×130	0.15	25.0	11.5	TGH392M64130□VA
	4700	64×130	0.15	20.0	12.6	TGH472M64130□VA
	5600	76×115	0.15	17.0	14.3	TGH562M76115□VA
	6800	76×130	0.15	14.0	16.8	TGH682M76130□VA
	8200	76×155	0.15	12.0	19.6	TGH822M76155□VA
	10000	89×157	0.15	9.0	23.0	TGH103M89157□VA
	12000	89×157	0.15	8.0	25.1	TGH123M89157□VA
	15000	89×195	0.15	6.6	30.6	TGH153M89195□VA
	18000	89×235	0.15	5.9	34.7	TGH183M89235□VA
400 (450)	1200	51×95	0.15	77.4	4.7	TGG122M51095□VA
	1500	51×95	0.15	66.3	5.3	TGG152M51095□VA
	1800	51×115	0.15	55.3	6.3	TGG182M51115□VA
	2200	51×130	0.15	45.2	7.5	TGG222M51130□VA
	2700	64×115	0.15	38.0	8.8	TGG272M64115□VA
	3300	64×130	0.15	30.0	10.5	TGG332M64130□VA
	3900	76×115	0.15	26.0	11.8	TGG392M76115□VA
	4700	76×130	0.15	21.0	13.9	TGG472M76130□VA
	5600	76×130	0.15	18.0	15.1	TGG562M76130□VA
	6800	76×155	0.15	15.0	17.9	TGG682M76155□VA
	8200	89×157	0.15	12.0	20.1	TGG822M89157□VA
	10000	89×170	0.15	10.0	23.2	TGG103M89170□VA
	12000	89×195	0.15	8.8	27.4	TGG123M89195□VA
	15000	89×235	0.15	7.1	29.0	TGG153M89235□VA

WV _{DC} (Surge Voltage) (V)	Cap (μ F)	Size D×L (mm)	tan δ 20°C 120Hz	ESR _{typ} 20°C 120Hz m Ω	Ripple Current 85°C 120Hz (Arms)	Catalog Part Number
450 (500)	1000	51×95	0.15	92.9	4.0	TGE102M51095□VA
	1200	51×115	0.15	77.4	4.8	TGE122M51115□VA
	1500	51×115	0.15	66.3	5.5	TGE152M51115□VA
	1800	51×130	0.15	55.3	6.4	TGE182M51130□VA
	2200	64×115	0.15	46.0	7.5	TGE222M64115□VA
	2700	64×130	0.15	38.0	8.9	TGE272M64130□VA
	3300	76×115	0.15	30.0	10.2	TGE332M76115□VA
	3900	76×130	0.15	27.0	11.9	TGE392M76130□VA
	4700	76×155	0.15	21.0	14.0	TGE472M76155□VA
	5600	89×130	0.15	18.0	14.2	TGE562M89130□VA
	6800	89×157	0.15	15.0	16.7	TGE682M89157□VA
	8200	89×170	0.15	12.0	19.3	TGE822M89170□VA
	10000	89×195	0.15	10.0	22.8	TGE103M89195□VA
	12000	89×235	0.15	8.8	26.3	TGE123M89235□VA
500 (550)	1000	51×115	0.15	108.8	4.4	TGC102M51115□VA
	1200	51×130	0.15	91.8	5.2	TGC122M51130□VA
	1500	51×150	0.15	74.0	6.3	TGC152M51150□VA
	1800	64×115	0.15	62.0	6.8	TGC182M64115□VA
	2200	64×130	0.15	51.0	7.9	TGC222M64130□VA
	2700	76×115	0.15	41.0	9.2	TGC272M76115□VA
	3300	76×130	0.15	34.0	10.7	TGC332M76130□VA
	3900	76×155	0.15	29.0	12.7	TGC392M76155□VA
	4700	89×130	0.15	24.0	14.1	TGC472M89130□VA
	5600	89×157	0.15	20.0	16.6	TGC562M89157□VA
	6800	89×170	0.15	16.0	17.7	TGC682M89170□VA
	8200	89×195	0.15	13.8	21.4	TGC822M89195□VA

*产品编码中□内为产品端子引出型式代码

*□Enter the appropriate terminal code

*记载之外的体积，请另行咨询。

*Please ask for advice for other sizes.

*铝电解电容器由于承受纹波电流而发热，随着温升而发生性能劣化。请在使用中降低产品承受的纹波电流。

*Aluminum electrolytic capacitor will emit heat when ripple current is applied, the performance will deteriorate when temp. rises. Please reduce the ripple current when using capacitor.