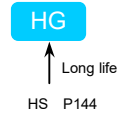


# HG 系列 SERIES



- 全焊结构，确保可靠的电气接触性  
All-welded construction ensures reliable electrical contact
- 优异的导热能力与高耐纹波电流能力  
Good thermal characteristics and high ripple current capability.
- 保证 105℃、10000 小时寿命。(叠加纹波电流)  
Endurance with ripple current: 10000 hours at 105℃
- 应用：变频器、机车牵引装置和专业电源  
Applications: Frequency converters, Traction and Professional power supplies



## ◆规格表 SPECIFICATIONS

项目 Items	特性 Characteristics								
工作温度范围 Operating Temperature Range	-40~+105℃								
额定工作电压范围 Rated Working Voltage Range	350~450V								
静电容量范围 Capacitance Range	1000~15000 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<sub>R</sub>(V)</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>tanδ</td> <td colspan="3">0.15</td> </tr> </table>	U <sub>R</sub> (V)	350	400	450	tanδ	0.15		
U <sub>R</sub> (V)	350	400	450						
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 <sub>R</sub> =额定电压 (V)      C <sub>R</sub> =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	12000h	>250000h	10000h	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 175% ≤175% 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±25%以内 Within±25% of initial value	初始值±15%以内 Within±15% 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	$U_R$ $I_R$ 105℃ ≤1% Failure rate	$U_R$ $1.2 \times I_R$ 40℃ ≤1% Failure rate	$U_R$ $I_R$ 105℃ 0%	$U_R$ $I_R=0$ 105℃ 0% Back up to 20℃ and placed more than 24 hours. U <sub>R</sub> to be applied for 60 min before measurement.

## ◆尺寸图 Dimensions

- 常用端子型式代码：Terminal Code

S-Type: Small terminal M5 thread  
L-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 HG 400V3300μF Φ64×130 ±20%

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
H	G	G	3	3	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: 51→51, 64→64) Diameter code (mm)  
容差代码 (例: ±20%→M) Capacitance Tolerance code  
容量代码 (例: 3300→332, 10000→103) Capacitance Code (μF)  
电压代码 (例: 350V→H, 400V→G) Rated Voltage Code (V)  
产品系列代码 (例: HG→HG) 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	+105
系数 Coefficient	2.44	2.16	2.00	1.00

◆ 产品一览表 Standard Ratings

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	tan $\delta$ 20°C 120Hz	ESR <sub>typ</sub> 20°C 120Hz m $\Omega$	Ripple Current 105°C 120Hz (Arms)	Catalog Part Number
350 (400)	1000	51×80	0.15	69.0	3.9	HGH102M51080□VA
	1200	51×95	0.15	65.0	4.5	HGH122M51095□VA
	1500	51×115	0.15	53.1	5.5	HGH152M51115□VA
	1800	51×130	0.15	43.0	6.2	HGH182M51130□VA
	2200	64×95	0.15	30.0	7.1	HGH222M64095□VA
	2700	64×115	0.15	27.0	8.3	HGH272M64115□VA
	3300	64×130	0.15	23.0	10.2	HGH332M64130□VA
	3900	76×115	0.15	19.0	11.3	HGH392M76115□VA
	4700	76×130	0.15	16.0	13.1	HGH472M76130□VA
	5600	76×155	0.15	14.0	14.7	HGH562M76155□VA
	6800	89×157	0.15	12.7	17.0	HGH682M89157□VA
	8200	89×157	0.15	10.5	19.1	HGH822M89157□VA
	10000	89×195	0.15	9.3	22.2	HGH103M89195□VA
	12000	89×235	0.15	7.7	25.5	HGH123M89235□VA
15000	89×250	0.15	6.0	29.3	HGH153M89250□VA	
400 (450)	1000	51×95	0.15	70.0	4.0	HGG102M51095□VA
	1200	51×115	0.15	60.8	4.8	HGG122M51115□VA
	1500	51×130	0.15	48.7	5.7	HGG152M51130□VA
	1800	64×95	0.15	40.5	6.4	HGG182M64095□VA
	2200	64×115	0.15	33.2	6.9	HGG222M64115□VA

WV <sub>DC</sub> (Surge Voltage) (V)	Cap ( $\mu$ F)	Size D×L (mm)	tan $\delta$ 20°C 120Hz	ESR <sub>typ</sub> 20°C 120Hz m $\Omega$	Ripple Current 105°C 120Hz (Arms)	Catalog Part Number	
400 (450)	2700	64×130	0.15	27.0	8.7	HGG272M64130□VA	
	3300	76×130	0.15	22.1	10.6	HGG332M76130□VA	
	3900	76×155	0.15	18.7	12.1	HGG392M76155□VA	
	4700	76×155	0.15	16.9	13.4	HGG472M76155□VA	
	5600	89×157	0.15	14.2	15.6	HGG562M89157□VA	
	6800	89×157	0.15	11.7	17.3	HGG682M89157□VA	
	8200	89×195	0.15	9.7	19.8	HGG822M89195□VA	
	10000	89×235	0.15	8.6	22.9	HGG103M89235□VA	
	450 (500)	1000	51×130	0.15	69.0	4.7	HGE102M51130□VA
		1200	64×115	0.15	57.5	5.5	HGE122M64115□VA
1500		64×130	0.15	46.0	6.5	HGE152M64130□VA	
1800		76×115	0.15	38.3	7.5	HGE182M76115□VA	
2200		76×130	0.15	31.4	8.7	HGE222M76130□VA	
2700		76×155	0.15	25.6	9.9	HGE272M76155□VA	
3300		89×130	0.15	21.3	11.1	HGE332M89130□VA	
3900		89×157	0.15	18.4	13.0	HGE392M89157□VA	
4700		89×170	0.15	15.5	14.4	HGE472M89170□VA	
5600		89×195	0.15	13.0	16.7	HGE562M89195□VA	
6800		89×235	0.15	10.7	19.2	HGE682M89235□VA	
8200		89×250	0.15	9.4	19.5	HGE822M89250□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.