

HS 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℃、5000 小时寿命。(叠加纹波电流)
Endurance with ripple current: 5000 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



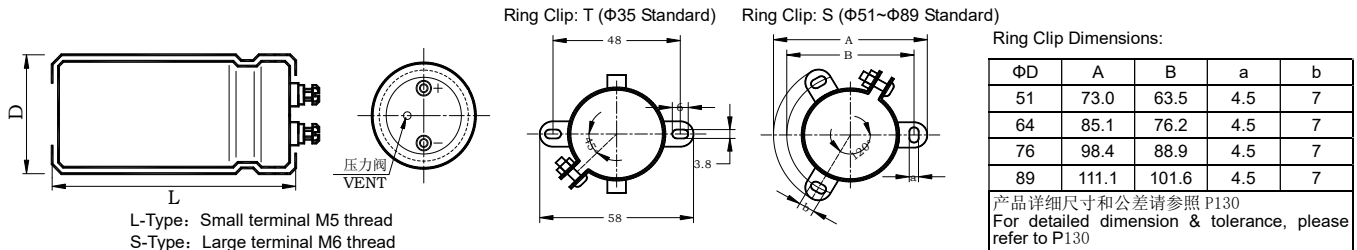
规格表 SPECIFICATIONS

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	350~500V										
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_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	9000h	>200000h	5000h	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 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 _R to be applied for 60 min before measurement.

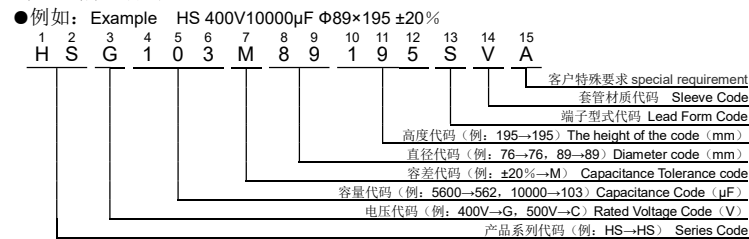
尺寸图 Dimensions

- 常用端子型式代码：Terminal Code



- 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



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 _{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 105°C 120Hz (Arms)	Catalog Part Number
350 (400)	1000	51×80	0.15	69.0	3.9	SHS102M51080□VA
	1200	51×80	0.15	65.0	4.2	SHS122M51080□VA
	1500	51×95	0.15	53.1	5.2	SHS152M51095□VA
	1800	51×115	0.15	43.0	5.7	SHS182M51115□VA
	2200	51×130	0.15	30.0	7.1	SHS222M51130□VA
	2700	64×95	0.15	27.0	8.1	SHS272M64095□VA
	3300	64×115	0.15	23.0	10.4	SHS332M64115□VA
	3900	64×130	0.15	19.0	11.0	SHS392M64130□VA
	4700	76×115	0.15	16.0	12.1	SHS472M76115□VA
	5600	76×130	0.15	14.0	13.8	SHS562M76130□VA
	6800	76×155	0.15	12.7	16.3	SHS682M76155□VA
	8200	89×157	0.15	10.5	19.1	SHS822M89157□VA
	10000	89×157	0.15	9.3	21.0	SHS103M89157□VA
	12000	89×195	0.15	7.7	25.0	SHS123M89195□VA
	15000	89×235	0.15	6.0	30.2	SHS153M89235□VA
400 (450)	1000	51×80	0.15	70.0	4.0	HSG102M51080□VA
	1200	51×95	0.15	60.8	4.7	HSG122M51095□VA
	1500	51×115	0.15	48.7	5.6	HSG152M51115□VA
	1800	51×130	0.15	40.5	6.4	HSG182M51130□VA
	2200	64×95	0.15	33.2	6.9	HSG222M64095□VA
	2700	64×115	0.15	27.0	8.4	HSG272M64115□VA
	3300	64×130	0.15	22.1	10.1	HSG332M64130□VA
	3900	76×115	0.15	18.7	11.7	HSG392M76115□VA
	4700	76×130	0.15	16.9	12.6	HSG472M76130□VA
	5600	76×155	0.15	14.2	14.9	HSG562M76155□VA
	6800	89×157	0.15	11.7	17.3	HSG682M89157□VA
	8200	89×157	0.15	9.7	19.1	HSG822M89157□VA
	10000	89×195	0.15	8.6	22.0	HSG103M89195□VA
	12000	89×235	0.15	7.7	27.1	HSG123M89235□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 105°C 120Hz (Arms)	Catalog Part Number	
450 (500)	1000	51×95	0.15	69.0	4.2	HSE102M51095□VA	
	1200	51×115	0.15	57.5	5.0	HSE122M51115□VA	
	1500	51×130	0.15	46.0	5.9	HSE152M51130□VA	
	1800	64×95	0.15	38.3	6.3	HSE182M64095□VA	
	2200	64×115	0.15	31.4	7.5	HSE222M64115□VA	
	2700	64×130	0.15	25.6	8.9	HSE272M64130□VA	
	3300	76×130	0.15	21.3	10.6	HSE332M76130□VA	
	3900	76×155	0.15	18.4	12.3	HSE392M76155□VA	
	4700	76×155	0.15	16.9	13.7	HSE472M76155□VA	
	5600	89×157	0.15	14.2	14.9	HSE562M89157□VA	
	6800	89×157	0.15	12.7	17.3	HSE682M89157□VA	
	8200	89×195	0.15	10.5	19.8	HSE822M89195□VA	
	10000	89×235	0.15	9.3	23.6	HSE103M89235□VA	
	500 (550)	1000	51×130	0.15	107.5	4.4	HSC102M51130□VA
		1200	64×115	0.15	90.7	5.2	HSC122M64115□VA
1500		64×130	0.15	74.0	6.2	HSC152M64130□VA	
1800		76×115	0.15	62.0	7.0	HSC182M76115□VA	
2200		76×130	0.15	51.0	8.0	HSC222M76130□VA	
2700		76×155	0.15	41.0	9.6	HSC272M76155□VA	
3300		89×130	0.15	34.0	10.7	HSC332M89130□VA	
3900		89×157	0.15	29.0	12.2	HSC392M89157□VA	
4700		89×170	0.15	24.0	13.9	HSC472M89170□VA	
5600		89×195	0.15	20.0	15.5	HSC562M89195□VA	
6800		89×235	0.15	16.0	18.1	HSC682M89235□VA	
8200		89×250	0.15	13.8	20.1	HSC822M89250□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.