

HGE 系列 Series

特点 Features

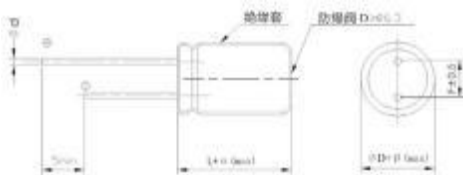
- 100KHZ 低阻抗, 105°C 2000小时。Low impedance at 100KHZ, Load life: 105°C 2000 hours.
- 在高频范围内降低ESR, 承受高纹波电流, 适用于电脑主机板。
Enabled high ripple current by a reduction of ESR at high frequency range.
Suitable for motherboard.
- RoHS指令已对应完毕。Adapted to the RoHS directive.



主要技术性能 Specifications

项目 Items	特性 Performance Characteristics										
使用温度范围 Operating Temperature Range	-55+105°C										
额定电压范围 Rated Voltage Range	6.3~25V										
标称电容容量范围 Nominal Capacitance Range	220~4700μF										
标称电容容量允许偏差 Capacitance Tolerance	±20% (120Hz, +20°C)										
漏电流 Leakage Current	I≤0.01CV (μA) 2分钟(at 20°C, after 2 minutes)										
损耗角正切值 (tgδ) Dissipation Factor (+20°C, 120Hz)	<table border="1"> <tr> <td>U_r (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> </tr> <tr> <td>tgδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> </tr> </table> <p>容量大于1000μF者, 每增加1000μF, 其损耗角正切值增加0.02 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.</p>	U _r (V)	6.3	10	16	25	tgδ	0.22	0.19	0.16	0.14
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温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>U_r (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>6</td> <td>4</td> </tr> </table>	U _r (V)	6.3	10	16	25	Z-40°C / Z+20°C	8	6	6	4
U _r (V)	6.3	10	16	25							
Z-40°C / Z+20°C	8	6	6	4							
耐久性 Load Life	<p>+105°C加额定电压2000小时, 恢复16小时后: After applying rated voltage for 2000 hours at +105°C and then resumed for 16 hours: 电容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏 电 流 Leakage current : ≤初始规定值 ≤the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value</p>										
高温贮存 Shelf Life	<p>+105°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +105°C and then resumed for 16 hours: 电容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏 电 流 Leakage current : ≤2倍初始规定值 ≤2times of the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value</p>										

外形图及尺寸表 Case Size Table



单位 Unit: mm

D	5	6.3	8	10	13	αMAX	α L < 20 > 1.5	βMAX	β D < 20 > 0.5
F	2.0	2.5	3.5	5.0	5.0		α L ≥ 20 > 2.0		β D ≥ 20 > 1.0
d	0.5	0.5	0.6	0.6					

频率修正系数 Frequency Coefficient

Freq. (Hz)	120	1K	10K	100K
CAP(μF)				
220~4700	0.50	0.80	0.90	1.00

尺寸 Dimensions

CAP(μF)	WV	6.3V(0J)			10V(1A)			16V(1C)			25V(1E)		
		Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
220	221							6.3×11	0.135	520	8×11.5	0.060	760
270	271				8×11.5	0.085	780	8×11.5	0.102	560	8×11.5	0.060	780
330	331							6.3×11	0.115	540	8×11.5	0.056	780
470	471	6.3×11	0.095	420	8×11.5	0.046	820	8×11.5	0.052	1036	8×16	0.048	1050
											10×13	0.045	1072
		8×11.5	0.058	780	8×11.5	0.043	1036	8×16	0.040	1355	10×16	0.038	1200
								10×13	0.038	1400			
		8×11.5	0.043	1036									
		8×11.5	0.036	1120	10×13	0.034	1355	8×20	0.025	1700			
								10×16	0.023	1818			
		8×16	0.034	1355									
		8×20	0.032	1700									
		8×20	0.026	1750	8×20	0.025	1700	10×20	0.022	2318			
		10×13	0.030	1400	10×16	0.028	1818						
		10×16	0.028	1818	10×20	0.025	2318	10×25	0.019	2410			
		10×20	0.025	2318	10×25	0.020	2400	13×20	0.018	2450			
		10×25	0.020	2545									
		10×30	0.018	2665									

Size φ D×L(mm)

Maximum Allowable Ripple Current (mA rms) at 105°C 100KHZ

Maximum ESR (Ω) at 20°C 100KHZ