

HGD 系列 Series

特点 Features

- 100KHZ 低阻抗, 105°C 2000~4000小时。
Low impedance at 100KHZ, Load life: 105°C 2000~4000 hours.
- 高频率低ESR、承受高纹波电流。
Enabled high ripple current by a reduction of ESR at high frequency range.
- 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	-40~+105°C										
额定电压范围 Rated Voltage Range	6.3~25V										
标称容量范围 Nominal Capacitance Range	100~3300μF										
标称容量允许偏差 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_n (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> </tr> <tr> <td>tgδ</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	U _n (V)	6.3	10	16	25	tgδ	0.18	0.14	0.12	0.10
	U _n (V)	6.3	10	16	25						
tgδ	0.18	0.14	0.12	0.10							
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.											
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>U_n (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>6</td> </tr> </table>	U _n (V)	6.3	10	16	25	Z-40°C / Z+20°C	8	6	6	6
	U _n (V)	6.3	10	16	25						
Z-40°C / Z+20°C	8	6	6	6							
耐老化性 Load life											
高温贮存 Shelf Life	<table border="1"> <tr> <td>φD</td> <td>5</td> <td>6.3</td> <td>8</td> <td>≥10</td> </tr> <tr> <td>Load life</td> <td>2000h</td> <td>3000h</td> <td>4000h</td> <td></td> </tr> </table>	φD	5	6.3	8	≥10	Load life	2000h	3000h	4000h	
	φD	5	6.3	8	≥10						
Load life	2000h	3000h	4000h								
105°C, 按上表时间加额定电压, 恢复16小时后: At 105°C, for the time above, After applying rated voltage 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											
+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											

外形图及尺寸表 Case Size Table



单位 Unit: mm

D	5	6.3	8	10	13	16	αMAX	〈 L < 20 〉 1.5	βMAX	〈 D < 20 〉 0.5
F	2.0	2.5	3.5	5.0	5.0	7.5		〈 L ≥ 20 〉 2.0		〈 D ≥ 20 〉 1.0
d	0.5	0.5	0.6	0.6	0.6	0.8				

频率修正系数 Frequency Coefficient

Freq.(Hz)	120	1K	10K	100K
CAP(μF)				
100~3300	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
100	101	5×11	0.245	240	5×11	0.300	250				6.3×11	0.085	600
220	221				6.3×11	0.065	410				8×11.5	0.052	820
330	331							6.3×11			8×11.5	0.034	1050
470	471				8×11.5	0.038	950	8×11.5	0.036	1140	10×13	0.026	1450
560	561	8×11.5	0.038	1080	8×11.5	0.038	960				8×20	0.023	1650
680	681	8×11.5	0.038	1100	8×11.5	0.036	1080	8×16	0.028	1490	8×20	0.023	1700
820	821							10×13	0.026	1540	10×16	0.022	1750
1000	102	8×11.5	0.036	1140	8×16	0.029	1450				10×20	0.020	1800
		8×16	0.036	1200	8×16	0.028	1490	8×20	0.022	1870	10×20	0.018	2180
1200	122	10×13	0.027	1500	10×13	0.026	1540	10×16	0.020	1910			
		8×16	0.028	1490	8×20	0.023	1850	10×20	0.017	2540			
1500	152	10×13	0.027	1520									
		8×20	0.020	1870	8×20	0.023	1900	10×20	0.018	2650	13×20	0.016	2480
1800	182	10×13	0.022	1540	10×16	0.022	2000						
		10×16	0.019	1850	10×20	0.020	2450	10×25	0.015	2800			
2200	222	8×20	0.018	1870	10×20	0.018	2500						
		10×16	0.018	1910	10×25	0.016	2650						
2700	272							13×30	0.014	3000	16×30	0.015	2555
3300	332	10×25	0.015	2800									

Size φD×L(mm)

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

Maximum ESR (Ω) at 20°C 100KHz