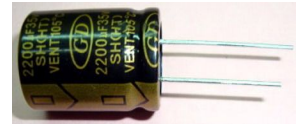




SH series general purpose 105⁰C 高溫度標準品

- 寬溫度產品，105⁰C，2000 小時壽命，體積小，容量大
Wide temperature range, 105⁰C, Load life: 2000 hours, small size, large capacity
- 適用於 VCD、DVD、背投彩電、空調等線路中
Used in VCD、DVD、color-TV、air conditioning circuits etc.



Specifications

No	Item	Performance																																			
1	使用溫度範圍 Operating Temperature Range	-40 to +105 ⁰ C	-25 to +105 ⁰ C																																		
2	定格電壓範圍 Rated Working Voltage Range	6.3 – 63V.DC	100 – 450V.DC																																		
3	靜電容量範圍 Capacitance Tolerance	0.1 – 22000 μ F	0.1 – 1000 μ F																																		
4	靜電容量容許差 Capacitance Tolerance	$\pm 20\%$ (at +20 ⁰ C, 120Hz)																																			
5	洩漏電流 Leakage Current	$I \leq 0.01CV$ or 3 (μ A) min	$I \leq 0.03CV$ or 20 (μ A) min																																		
		L: Leakage Current (μ A) C: Rated Capacitance (μ F) V: Working Voltage (V) Whichever is greater after 3 minutes.																																			
6	損失角 Dissipation Factor ($\tan \delta$) (120Hz/+20 ⁰ C)	<table border="1"> <thead> <tr> <th>Working Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160, 250</th> <th>350~450</th> </tr> </thead> <tbody> <tr> <td>$\tan \delta$ max.</td> <td>0.22</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.20</td> <td>0.24</td> </tr> </tbody> </table>										Working Voltage (V)	6.3	10	16	25	35	50	63	100	160, 250	350~450	$\tan \delta$ max.	0.22	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.20	0.24				
		Working Voltage (V)	6.3	10	16	25	35	50	63	100	160, 250	350~450																									
$\tan \delta$ max.	0.22	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.20	0.24																											
		For capacitance value > 1000 μ F, add 0.02 per another 1000 μ F																																			
7	溫度特性 (at 120 Hz) Characteristics at low temperature (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>Working Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25~100</th> <th>160~250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z-25⁰C/+20⁰C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>6</td> <td>6</td> <td>15</td> </tr> <tr> <td>Z-40⁰C/+20⁰C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>									Working Voltage (V)	6.3	10	16	25~100	160~250	350	400	450	Z-25 ⁰ C/+20 ⁰ C	4	3	2	2	3	6	6	15	Z-40 ⁰ C/+20 ⁰ C	8	6	4	3	-	-	-	-
		Working Voltage (V)	6.3	10	16	25~100	160~250	350	400	450																											
		Z-25 ⁰ C/+20 ⁰ C	4	3	2	2	3	6	6	15																											
Z-40 ⁰ C/+20 ⁰ C	8	6	4	3	-	-	-	-																													
For capacitance value > 1000 μ F, Add 0.5 per another 1000 μ F for -25 ⁰ C/+20 ⁰ C. Add 1.0r another 1000 μ F for -40 ⁰ C/+20 ⁰ C																																					
8	高溫負荷特性 High Temperature Loading	After 2000hrs. application of DC rated working voltage at +105 ⁰ C. The capacitor shall meet the following limits: Post test requirements at +20 ⁰ C																																			
		Leakage current		\leq the Initial specified value																																	
		Capacitance change		$\leq \pm 25\%$ of initial measured value																																	
9	高溫無負荷特性 Shelf Life	After 1000hrs. Application of DC no rated working voltage at +105 ⁰ C, The capacitor shall meet the following limits: Post test requirements at +20 ⁰ C																																			
		Leakage current		$\leq 200\%$ of initial specified value																																	
		Capacitance change		$\leq \pm 20\%$ of initial measured value																																	
		Dissipation Factor ($\tan \delta$)		$\leq 200\%$ of initial specified value																																	

Multiplier for ripple current 紋波電流補正係數

Frequency Coefficient 周波數係數

Frequency μ F	60 (50) Hz	120 Hz	400Hz	1K Hz	$\geq 10K$ Hz
0.1~47	0.80	1.00	1.20	1.30	1.50
68~680	0.80	1.00	1.10	1.15	1.20
1000~22000	0.80	1.00	1.05	1.10	1.15

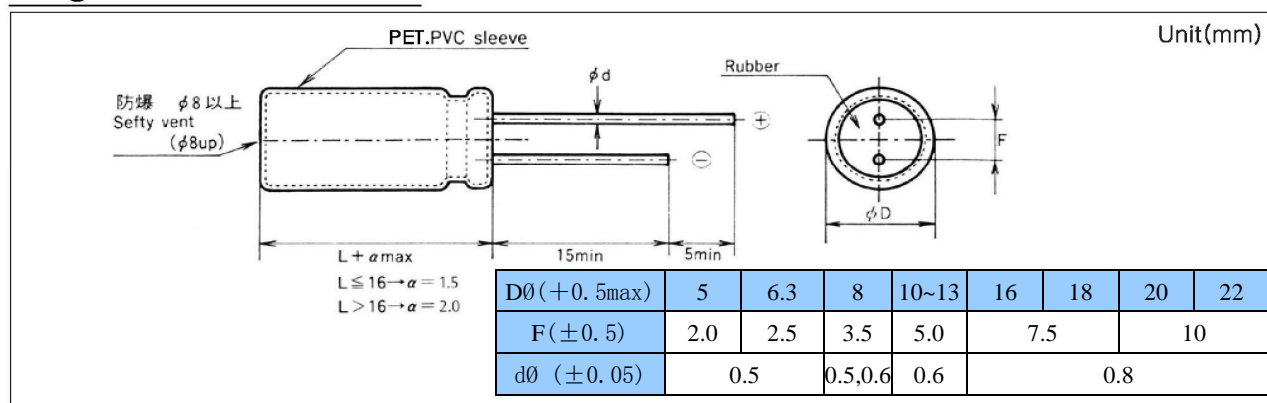
Temperature Coefficient 周圍溫度係數

Coefficient	temperature (⁰ C)	105	85	≤ 65
coefficient		1.0	1.7	2.1



SH series

Diagram of Dimension



DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 规格尺寸及最大允许纹波电流

W.V. (SV) μF	6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)		63 (79)	
	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.
0.1											5×11	1.3	5×11	1.3
0.22											5×11	2.9	5×11	2.9
0.33											5×11	4	5×11	4
0.47											5×11	8	5×11	9
0.68											5×11	9	5×11	9
1.0											5×11	13	5×11	18
2.2											5×11	20	5×11	20
3.3											5×11	25	5×11	28
4.7											5×11	30	5×11	34
6.8											5×11	37	5×11	40
10							5×11	45	5×11	47	5×11	46	5×11	50
22					5×11	55	5×11	60	5×11	66	6.3×11	68	6.3×11	82
33			5×11	60	5×11	72	5×11	79	5×11	90	6.3×11	90	8×11	100
47			5×11	71	5×11	86	5×11	94	6.3×11	100	6.3×11 8×9	125 130	8×11	135
68			5×11	83	5×11	110	6.3×11	114	6.3×11	150	8×11	162	10×13	200
100	5×11	102	5×11	115	5×11 6.3×11	120 135	6.3×11	148	8×11	210	8×11 10×13	230 250	10×13	263
220	6.3×11	185	6.3×11	190	6.3×11 8×11	220 242	8×11	255	8×14 10×13	288 320	10×16	360	10×20	400
330	6.3×11	210	6.3×11	235	8×11	300	8×14 10×13	335 367	8×14 10×16	400 460	10×21	470	13×21	540
470	6.3×11	275	8×11	340	8×11 10×13	375 400	8×14 10×13	375 440	10×16 10×21	525 589	13×21	600	13×25	700
560	8×12	310	8×12	330	10×13	410	10×16	460	10×21	590	16×21	630	16×26	750
680	8×12	314	10×13	390	10×13	480	10×21	520	10×21	650	16×21	730	16×26	860
820	8×12	390	10×13	480	10×16	550	10×21	640	13×21	740	13×25	850	16×26	920
1000	10×13	460	10×13 10×16	520 580	10×16	640	10×21 13×16	740 784	13×21	865	16×26	1060	16×31	1200
2200	10×21	775	10×21	860	13×21	1050	13×26	1230	16×26	1379	18×36	1600		
3300	13×21	985	13×21	1100	13×25	1300	16×26	1500	16×36	1680	18×36	1780		
4700	13×21	1150	13×25	1350	16×26	1650	16×36	1932	18×36	2177				
5600	13×25	1300	16×26	1490	16×32	1720	16×36	1950	18×36	2190				
6800	16×26	1480	16×26	1700	16×32	1900	18×36	2050						
8200	16×26	1520	16×32	1840	16×36	1950	18×36	2090						
10000	16×26	1700	16×36	1950	18×36	2090								
12000	16×32	1750	16×36	2050	18×36	2150								
15000	18×36	2090	16×36	2180										
18000	18×36	2150	18×36	2205										
22000	18×41	2300												

Case size $\emptyset D \times L$ (mm); Ripple current (mA rms) at 105°C, 120Hz



SH series

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 规格尺寸及最大允许纹波电流

W.V. (SV) μF	100 (125)		160 (200)		200 (250)		250 (300)		350 (400)		400 (450)		450 (500)	
	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.
0.1	5×11	1.9												
0.22	5×11	3.4												
0.33	5×11	5												
0.47	5×11	10	5×11	11	5×11	12	5×11	12	6.3×12	13	6.3×12	13	6.3×12	13
0.68	5×11	12	5×11	14	6.3×12	13	6.3×12	13	6.3×12	13	6.3×12	13	8×12	13
1.0	5×11	15	6.3×12	17	6.3×12	17	6.3×12	16	6.3×12	16	8×12	20	8×12	20
2.2	5×11	21	6.3×12	25	6.3×12	25	8×12	25	8×12	31	8×12	36	10×13	35
3.3	5×11	30	6.3×12	32	8×12	35	8×12	38	8×12	38	8×12	40	10×13	31
											10×13	47	10×16	40
4.7	5×11	35	6.3×12	43	8×12	45	8×12	48	10×13	50	8×12	50	10×21	80
											10×13	60		
											10×16	70		
6.8	6.3×11	47	8×12	50	10×13	56	10×13	65	10×13	66	8×12	56	10×21	87
											10×16	79		
10	6.3×12	56	10×13	68	8×12	70	10×16	92	10×20	95	10×20	85	13×21	90
					10×13	80								
					10×16	92								
22	8×12	96	10×16	133	10×16	125	13×21	160	13×21	175	13×26	178	13×26	178
					10×21	130								
33	8×12	140	10×21	184	13×21	200	13×21	200	13×26	220	16×26	252	16×26	255
47	10×13	200	13×21	210	13×21	220	13×21	240	16×26	260	16×26	300	16×32	319
68	10×16	240	13×21	280	13×26	300	16×26	355	16×32	320	16×36	480	18×36	470
											18×36	500		
82					16×26	360	16×26	370	18×32	410	18×32	520	18×36	480
100	13×21	288	13×26	310	16×26	345	16×32	395	18×36	390	18×36	55	18×41	560
120	13×21	295	16×26	350	16×32	360	16×36	370	18×36	400	18×36	580	22×41	650
											18×41	620		
150	13×21	360	16×26	470	16×32	480	16×36	460	18×41	420	18×41	650		
180	13×21	480	16×26	550	16×36	520	18×36	470	18×41	430	18×45	700		
220	13×21	520	16×32	580	16×32	550	18×36	650	22×41	500				
					18×36	650	18×41	700						
330	16×26	690	18×36	705	18×41	670	22×41	780						
					22×41	790								
470	16×26	820												
	16×32	860	18×41	860										
	18×32	880												
560	16×36	880												
680	16×36	920												
	18×32	950												
820	18×36	970												
1000	18×41	1200												
	22×25	1500												

Case size ØD×L (mm); Ripple current (mA rms) at 105°C, 120Hz