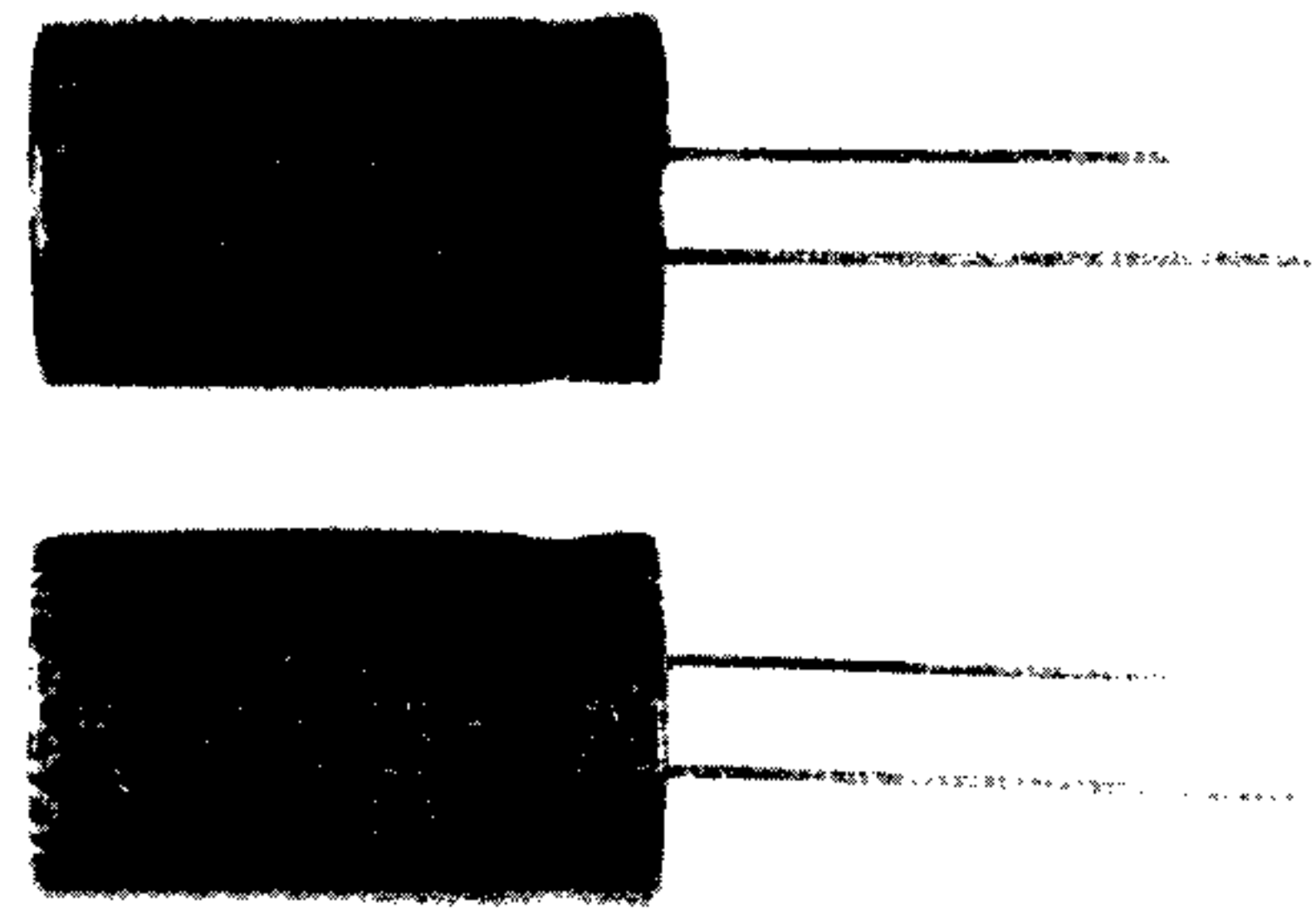


# GENERAL PURPOSE RADIAL CAPACITORS

## GPR series General Purpose 85°C 一般標準品

- 本系列為高 CV 值，適用於一般民生電子產品，有防爆孔設計，在 85°C 常溫下，耐用 2000 小時。
- Wide CV value range for general purpose.
- Safely vent construction products, GPR series are guaranteed 2,000 hours at 85°C.



### specifications

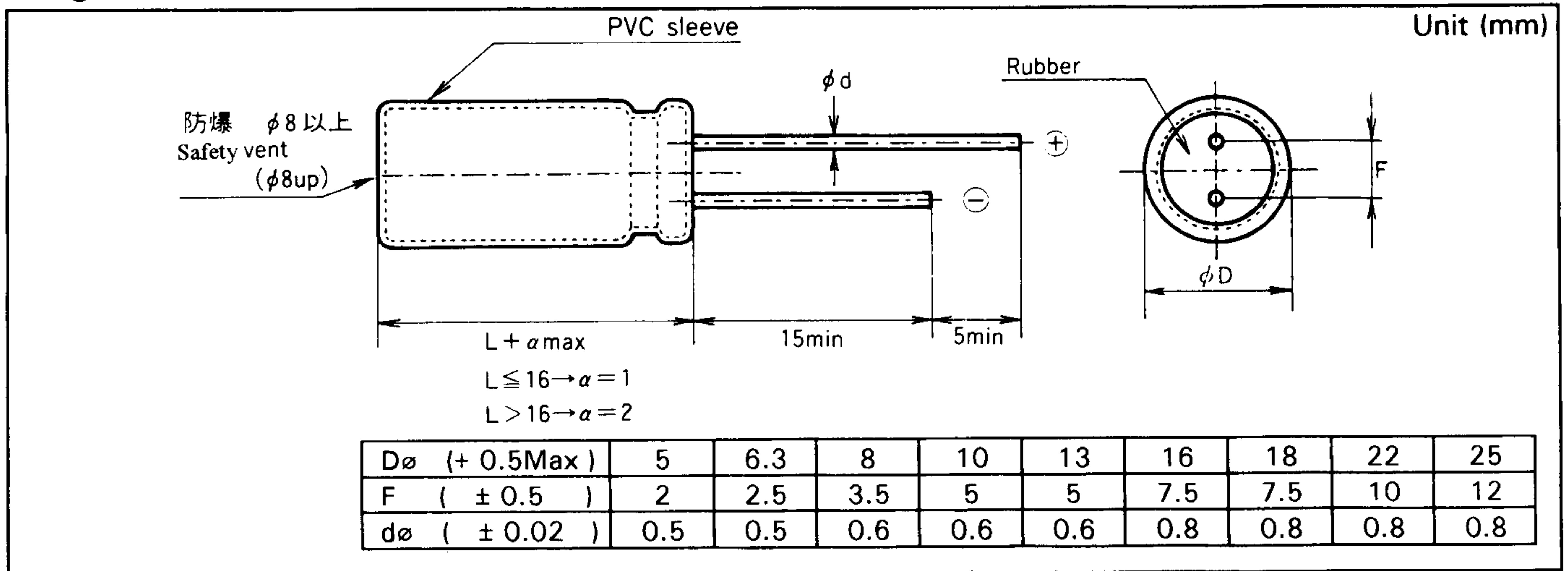
No.	Item	Performance																																																										
1	使用溫度範圍 Operating Temperature Range	-40 to +85°C	-25 to +85°C																																																									
2	定格電壓範圍 Rated Working Voltage Range	6.3 - 100v.DC	160 - 450v.DC																																																									
3	靜電容量範圍 Nominal Capacitance Range	0.1 - 22000μF	0.47 - 820μF																																																									
4	靜電容量容許差 Capacitance Tolerance	±20% (at +20°C, 120Hz)																																																										
5	漏洩電流 Leakage Current	I = 0.01CV or 3(μA) max	I ≤ 0.03CV + 30(μA) max																																																									
		Whichever is greater after 3 minutes. I: Leakage Current (μA) C: Rated Capacitance (μF) V: Working Voltage (v)																																																										
6	損失角 Dissipation Factor(tanδ) (120Hz, +20°C)	<table border="1"> <thead> <tr> <th>Working Voltage</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</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tanδ max.</td> <td>0.22</td> <td>0.2</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.1</td> <td>0.09</td> <td>0.08</td> <td>0.2</td> <td>0.2</td> <td>0.18</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </tbody> </table>														Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	tanδ max.	0.22	0.2	0.17	0.15	0.12	0.1	0.09	0.08	0.2	0.2	0.18	0.20	0.20	0.20															
		Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																												
tanδ max.	0.22	0.2	0.17	0.15	0.12	0.1	0.09	0.08	0.2	0.2	0.18	0.20	0.20	0.20																																														
		Add 0.02 per 1000 μF for more than 1000μF.																																																										
7	容許電流 Ripple Current	Refer to standard products table (120Hz, +85°C). Correction factor for frequency.																																																										
		<table border="1"> <thead> <tr> <th>Frequency (Hz)</th> <th>50/60</th> <th>120</th> <th>1K</th> <th>10K</th> </tr> </thead> <tbody> <tr> <td>Correction factor(Multiplier)</td> <td>0.7</td> <td>1</td> <td>1.3</td> <td>1.7</td> </tr> </tbody> </table>														Frequency (Hz)	50/60	120	1K	10K	Correction factor(Multiplier)	0.7	1	1.3	1.7																																			
Frequency (Hz)	50/60	120	1K	10K																																																								
Correction factor(Multiplier)	0.7	1	1.3	1.7																																																								
8	溫度特性(at 120 Hz) Characteristics at low temperature (stability at 120 Hz)	<table border="1"> <thead> <tr> <th>Working Voltage</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</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>-25°C/+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>5</td> <td>12</td> <td>15</td> </tr> <tr> <td>-40°C/+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>														Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	-25°C/+20°C	4	3	2	2	2	2	2	2	2	3	3	5	12	15	-40°C/+20°C	8	6	4	4	3	3	3	3						
		Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																												
-25°C/+20°C	4	3	2	2	2	2	2	2	2	3	3	5	12	15																																														
-40°C/+20°C	8	6	4	4	3	3	3	3																																																				
		For capacitance value > 1000 μF, Add 0.5 per another 1000 μF for -25°C/+25°C. Add 1.0 per another 1000μF for -40°C/+20°C.																																																										
9	高溫負荷特性 High Temperature Loading	After 2000hrs. application of DC rated working voltage at +85°C, The capacitor shall meet the following limits: Post test requirements at +20°C.																																																										
		<table border="1"> <tbody> <tr> <td>Leakage current</td> <td colspan="13">≤ the Initial specified value</td> </tr> <tr> <td>Capacitance change</td> <td colspan="13">≤ ±20% of initial measured value</td> </tr> <tr> <td>Dissipation Factor(tanδ)</td> <td colspan="13">≤ 150% of initial specified value</td> </tr> </tbody> </table>														Leakage current	≤ the Initial specified value													Capacitance change	≤ ±20% of initial measured value													Dissipation Factor(tanδ)	≤ 150% of initial specified value															
Leakage current	≤ the Initial specified value																																																											
Capacitance change	≤ ±20% of initial measured value																																																											
Dissipation Factor(tanδ)	≤ 150% of initial specified value																																																											
10	高溫無負荷特性 Shelf Life	After storage for 500hrs. at +85°C with no voltage applied. Post test requirements at +20°C same limits as high temperature loading.																																																										



# GENERAL PURPOSE RADIAL CAPACITORS

## GPR series General Purpose 85°C 一般標準品

### Diagram of Dimensions



### Case Size Table

$\mu F$ \ W.V.(SV)	$\phi D \times L$ (mm)							
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.1					→	5X11		5X11
0.22					→	5X11		5X11
0.33					→	5X11		5X11
0.47					→	5X11		5X11
1.0					→	5X11		5X11
2.2					→	5X11		5X11
3.3					→	5X11		5X11
4.7					→	5X11		5X11
10			→	5X11	5X11	5X11	5X11	6.3X11
22			→	5X11	5X11	5X11	6.3X11	8X11
33		→	5X11	5X11	5X11	6.3X11	6.3X11	10X13
47		→	5X11	5X11	6.3X11	6.3X11	8X11	10X16
100	→	5X11	6.3X11	6.3X11	8X11	8X11	10X13	13X21
220	→	6.3X11	6.3X11	8X11	10X13	10X16	10X21	16X26
330	→	6.3X11	8X11	10X13	10X16	10X21	13X21	16X26
470	6.3X11	8X11	8X11	10X16	10X16	13X21	13X26	16X32
1,000	8X11	10X13	10X16	10X21	13X21	16X26	16X32	18X42
2,200	10X21	10X21	13X21	13X26	16X26	16X36	18X36	25X50
3,300	13X21	13X21	13X26	16X26	16X36	18X36	22X42	
4,700	13X26	13X26	16X26	16X36	18X36	22X41	25X50	
6,800	16X26	16X26	16X36	18X36	22X41	25X50	30X46	
8,200	16X32	18X36	18X42	22X46	22X50	30X46		
10,000	16X32	18X32	18X36	22X41	25X50	30X46		
15,000	18X36	18X36	22X50	25X50				
22,000	22X40	22X50	25X50	30X46				

\* 空格部份膠管所標示的電壓以 " → " 右方一格表示

\* All blank dimensions is the same dimensions as " → " point to.

