



GR SERIES

General Purpose 85°C 2000HR 一般標準品 85°C

Features

- For general purpose
- Life 2000 hours at +85°C
- Wide CV value range
- Safety vent construction products

Specifications

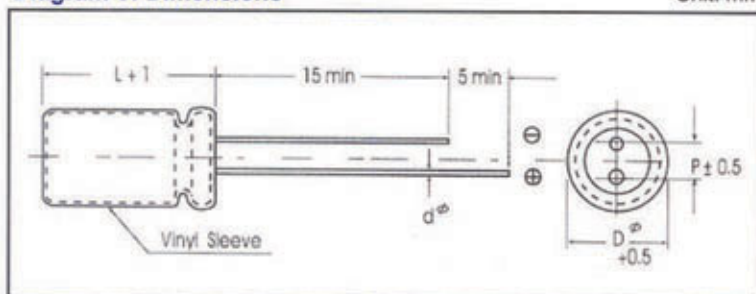
Items	Performance Characteristics																																																	
Operating Temperature Range	-40 to +85°C	-25 to +85°C																																																
Rated Working Voltage Range	6.3 to 100V DC	160 to 450V DC																																																
Nominal Capacitance Range	0.1 to 22000 μ F	0.47 to 820 μ F																																																
Capacitance Tolerance	$\pm 20^\circ$ C (120Hz, +20°C)																																																	
Leakage Current	1 \leq 0.02CV or 3(μ A) after 3 minutes whichever greater measured with rated working voltage applied at +20°C	1 \leq 0.03CV 40 μ A after 3 minutes application of rated working voltage at +20°C																																																
Dissipation Factor (tan δ) (120Hz, +20°C)	<table border="1"> <tr> <td>Working voltage (v)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tan δ (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> </tr> </table> <table border="1"> <tr> <td>Working voltage (v)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>tan δ (max)</td> <td>0.20</td> <td>0.20</td> <td>0.18</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </table> <p>For capacitance value > 100 μF, Add 0.02 per another 100 μF</p>									Working voltage (v)	6.3	10	16	25	35	50	63	100	tan δ (max)	0.22	0.20	0.17	0.15	0.12	0.10	0.09	0.08	Working voltage (v)	160	200	250	350	400	450	tan δ (max)	0.20	0.20	0.18	0.20	0.20	0.20									
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Ripple Current	<p>Refer to standard products table (120Hz, +85°C) Correction factor for frequency</p> <table border="1"> <tr> <td>Frequency (Hz)</td> <td>50/60</td> <td>120</td> <td>1K</td> <td>10K</td> </tr> <tr> <td>Correction factor (Multiplier)</td> <td>0.7</td> <td>1</td> <td>1.3</td> <td>1.7</td> </tr> </table>									Frequency (Hz)	50/60	120	1K	10K	Correction factor (Multiplier)	0.7	1	1.3	1.7																															
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Low Temperature Characteristics	<p>Impedance ratio max. at 120Hz</p> <table border="1"> <tr> <td>Working voltage (v)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <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> </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> </tr> </table> <table border="1"> <tr> <td>Working voltage (v)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>tan δ (max)</td> <td>2</td> <td>3</td> <td>3</td> <td>5</td> <td>12</td> <td>15</td> </tr> </table> <p>For capacitance value > 1000 μF, Add 0.5 per another 1000 μF for -25°C/+25°C Add 1.0 per another 1000 μF for -40°C/+20°C</p>									Working voltage (v)	6.3	10	16	25	35	50	63	100	-25°C/+20°C	4	3	2	2	2	2	2	2	-40°C/+20°C	8	6	4	4	3	3	3	3	Working voltage (v)	160	200	250	350	400	450	tan δ (max)	2	3	3	5	12	15
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High Temperature Loading	<p>Test conditions</p> <p>Duration : 2000 hours</p> <p>Ambient temperature : +85°C</p> <p>Applied Voltage : Rated DC working voltage</p> <p>Post test requirements at +20°C</p> <p>Leakage current : \leq initial specified value</p> <p>Capacitance change : \leq +20% of initial measured value</p> <p>tan δ : \leq +150% of initial specified value</p>																																																	

General Purpose 85°C 2000HR 一般標準品 85°C
Specifications

Items	Performance Characteristics	
Shelf Life	Test conditions	Post test eqirements at +20°C
	Duration : 500 hour	Same limits for high temperature loading.
	Ambient temperature : +85°C	
	Applied voltage : (None)	
Others	Satisfies characteristic W of JIS C 5141	

Diagram of Dimensions

Unit: mm



Dφ	5	6.3	8	10	13	16	18	22	25
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	12.0
dφ	0.5		0.6			0.8			

Case Size Table

φD×L (mm)

μF \ W.V. (SV)	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.1					→	5×11		5×11
0.22					→	5×11		5×11
0.33					→	5×11		5×11
0.47					→	5×11		5×11
1.0					→	5×11		5×11
2.2					→	5×11		5×11
3.3					→	5×11		5×11
4.7					→	5×11		5×11
10			→	5×11	5×11	5×11	5×11	6.3×11
22			→	5×11	5×11	5×11	6.3×11	8×11
33		→	5×11	5×11	5×11	6.3×11	6.3×11	8×11
47		→	5×11	5×11	6.3×11	6.3×11	8×11	10×16
100	→	5×11	6.3×11	6.3×11	8×11	8×11	10×13	10×17
220	→	6.3×11	6.3×11	8×11	8×14	10×16	10×21	13×21
330	→	6.3×11	8×11	8×11	10×16	10×17	10×21	16×26
470	6.3×11	8×11	8×11	8×14	10×16	10×20	13×21	16×32
1,000	8×11	8×14	10×16	10×17	13×21	13×26	16×26	18×42
2,200	10×15	10×17	10×20	13×21	16×26	16×32	18×36	25×50
3,300	10×20	13×21	13×21	16×26	16×32	18×36	22×42	
4,700	13×21	13×21	16×26	16×36	18×36	22×36	25×50	
6,800	16×26	16×26	16×36	18×36	18×36	22×42	30×46	
8,200	16×32	18×36	18×42	22×46	22×50	30×46		
10,000	16×32	18×32	18×36	22×41	25×50	30×46		
15,000	18×36	18×36	22×50	25×50				
22,000	22×40	22×50	25×50	30×46				

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

