



General Purpose, 105°C

Case Size

φD x L (mm)

μF	W.V. {S.V.}	50 {63}		63 {79}		100 {125}		200 {250}	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1		5x11	1.3	5x11	1.3	5x11	1.3	-	-
0.22		5x11	2.9	5x11	2.9	5x11	2.9	-	-
0.33		5x11	4.2	5x11	4.2	5x11	4.2	-	-
0.47		5x11	8	5x11	8	5x11	8	5x11	12
1		5x11	14	5x11	14	5x11	15	6.3x11	17
2.2		5x11	20	5x11	21	5x11 6x11	22 24	6.3x11	33
3.3		5x11	26	5x11	28	5x11	30	6.3x11	43
4.7		5x11	32	5x11	34	5x11	36	8x11	51
6.8		5x11	40	5x11	42	6.3x11	47	10x12	63
10		5x11 6x11	50 55	5x11	51	6.3x11	60	10x12 10x15	83 90
22		5x11	75	5x11 6.3x11	75 85	6.3x11 8x11	98 105	10x20	135
33		5x11 6.3x11	90 95	6.3x11 8x11	105 115	8x11 10x12	145 155	13x21	180
47		6.3x11	120	6.3x11 8x11	145 155	10x12 10x15	170 180	13x21 13x26	220 230
68		8x11	155	8x11	185	10x15 10x17	240 250	16x26	300
100		8x11	200	8x11 10x12	220 240	10x15 10x20	250 270	16x26	360
220		8x16 10x12 10x15 10x17	355 350 360 365	10x17 10x20	400 430	13x26 16x26	530 560	18x36	590
330		10x15 10x17 10x20	435 450 470	10x20 13x21	500 570	16x26	680	18x32 18x36	590 740
470		10x20 13x21	590 610	13x21 13x26 16x26	640 700 720	16x26 16x31	840 860	22x42	890
560		13x21	660	13x26	770	16x36	880	-	-
680		13x21 13x26	730 770	16x26	880	16x36	920	-	-
820		13x26	850	16x26	920	18x32	970	-	-
1000		13x26 16x21 16x26	900 950 1010	16x26 16x36	1150 1220	18x41	1250	-	-
1500		16x31	1300	18x32	1350	22x42	1500	-	-
2200		16x26 16x31 18x36	1400 1450 1550	18x36 22x42	1590 2100	25x44	1880	-	-
2700		18x36	1610	22x42	1720	-	-	-	-
3300		18x36	1780	22x42	1900	-	-	-	-
4700		22x42	2050	25x44	2200	-	-	-	-
5600		25x44	2160	-	-	-	-	-	-
6800		25x44	2280	-	-	-	-	-	-
10000		25x44	2800	-	-	-	-	-	-

*Ripple Current (mA, rms) at 105°C 120Hz

RADIAL



General Purpose, 105°C



Features

- Used in communication equipments, switching power supply, etc.
- Safety vent construction design

Specifications

Item	Performance Characteristics																														
Operating Temperature Range	-40 to +105°C																														
Rated voltage Range	6.3 to 100 VDC																														
Capacitance Range	0.1 to 15000 µF																														
Capacitance Tolerance	±20% (120Hz, +20°C)																														
Leakage Current (+20°C, max.)	I ≤ 0.01 CV or 3(µA) After 1 minute whichever is greater measured with rated working voltage applied.																														
Dissipation Factor (tanδ)	<table><tr><td>Working Voltage (VDC)</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><td>250</td></tr><tr><td>D.F.(%)max</td><td>23</td><td>20</td><td>16</td><td>14</td><td>12</td><td>10</td><td>10</td><td>10</td><td>16</td></tr></table> For Capacitance > 1000µF, add 2% per another 1000µF (+20°C, at 120Hz)	Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	250	D.F.(%)max	23	20	16	14	12	10	10	10	16										
Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	250																						
D.F.(%)max	23	20	16	14	12	10	10	10	16																						
Low Temperature Characteristics (at 120Hz)	Impedance ratio max. <table><tr><td>Working Voltage (VDC)</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><td>250</td></tr><tr><td>Z (-25°C)/Z(+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>3</td></tr><tr><td>Z (-40°C)/Z(+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></tr></table> For Capacitance Value 1000µF, add 0.5 per another 1000µF for -25°C/+20°C For Capacitance Value 1000µF, add 1 per another 1000µF for -40°C/+20°C	Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	250	Z (-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	3	Z (-40°C)/Z(+20°C)	8	6	4	4	3	3	3	3	-
Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	250																						
Z (-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	3																						
Z (-40°C)/Z(+20°C)	8	6	4	4	3	3	3	3	-																						
Load Life	Test conditions Duration time : 2000Hrs Ambient temperature: +105°C Applied voltage: Rated DC working voltage After test requirements: at +20°C After test requirements: ≤ ±20% of the initial measured value Dissipation Factor: ≤ 200% of the initial specified value Leakage current: ≤ The initial specified value																														
Shelf Life	Test conditions Duration time : 1000Hrs Ambient temperature: +105°C Applied voltage: None After test requirements at +20°C: Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																														

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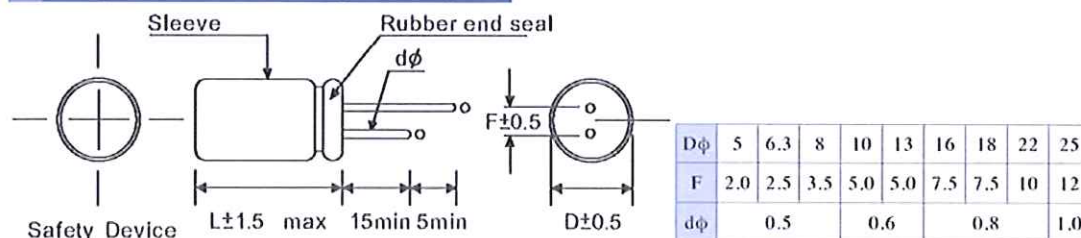
Multiplier for Ripple Current VS. Frequency

CAP(µF)/Hz	50(60)	120	400	1K	10K	50-100K
CAP≤10	0.8	1.0	1.30	1.45	1.65	1.70
10<CAP≤100	0.8	1.0	1.23	1.36	1.48	1.53
100<CAP≤1000	0.8	1.0	1.16	1.25	1.35	1.38
1000<CAP	0.8	1.0	1.11	1.18	1.25	1.28

Multiplier for Ripple Current VS. Temperature

Temperature (°C)	45	60	70	85	105
Multiplier	2.10	1.90	1.65	1.40	1.00

Diagram of Dimensions: (Unit: mm)



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7392
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General Purpose, 105°C



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Case Size			φD x L (mm)				
μF	W.V. {S.V.}	16 {20}		25 {32}		35 {44}	
		Size	Ripple	Size	Ripple	Size	Ripple
1		5x11	9	5x11	9	5x11	11
4.7			→	5x11	27	5x11	29
6.8			→	5x11	35	5x11	38
10		5x11	38	5x11	40	5x11	42
22		5x11	56	5x11	60	5x11	62
33		5x11	65	5x11	70	5x11	78
47		5x11	100	5x11	105	5x11 6.3x11	110 115
68		5x11	105	6.3x11	120	6.3x11	140
100		5x11	115	5x11	135	6.3x11	165
		6.3x11	135	6.3x11	150	8x11	180
		8x11	165	8x11	175	8x14	190
220		6.3x11	220	6x11	230	8x11	300
		8x11	230	8x11	240	8x14	325
				10x12	285	8x16	330
						8x20	350
330						10x12	330
		8x11	300	8x11	350	10x15	410
				8x14	352		420
470				10x12	355		
		8x11	380	8x14	415	8x20	500
		8x14	390	10x12	445	10x12	460
		10x12	400	10x15	450	10x15	470
				10x20	465	10x17	480
560					10x20	520	
680		10x12	410	10x15	460	10x17	540
						13x14	500
		8x14	470	10x12	450	10x20	650
820		10x12	480	10x15	520	13x21	750
				10x17	600		
		10x15	550	10x15	640	10x20	760
1000						10x20	810
		8x16	570			10x25	870
		8x20	595	10x15	740	10x25	870
		10x12	580	10x17	800	13x14	850
		10x13	590	10x20	850	13x16	860
		10x15	600	13x16	850	13x21	880
		10x17	630	13x21	900	13x26	910
		10x20	640			16x16	910
1500		10x20	820	13x21	910	13x26	970
2200						13x26	1260
		10x20	980	10x25	1180	16x21	1290
		13x16	980	13x21	1210	16x21	1290
		13x21	1020	13x26	1250	16x26	1300
		13x26	1060	16x16	1270	16x31	1400
2700			16x26	1290	18x17	1280	
3300		13x21	1100	16x26	1330	16x31	1500
		13x21	1220	16x26	1480	16x31	1620
		13x26	1240	16x31	1540	16x36	1680
4700		16x16	1220	18x17	1450	18x36	1720
		13x26	1450				
		16x26	1620	16x31	1800	18x36	1900
5600		18x17	1560				
		16x31	1720				
6800		18x19	1660	16x36	1890	18x36	2000
8200							
		16x31	1880	18x36	2040	18x41	2090
10000		16x36	1950	18x36	2090	22x42	2180
		18x36	2060	18x41	2160	18x41	2200
		18x41	2080	22x42	2200	25x44	2300
15000		22x42	2300	22x42	2500	-	-

•Ripple Current (mA, rms) at 105°C 120Hz