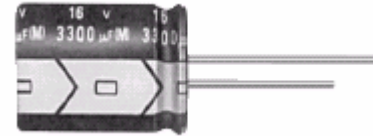


- Load life of 1000 hours at 105°C
- Wide temperature range

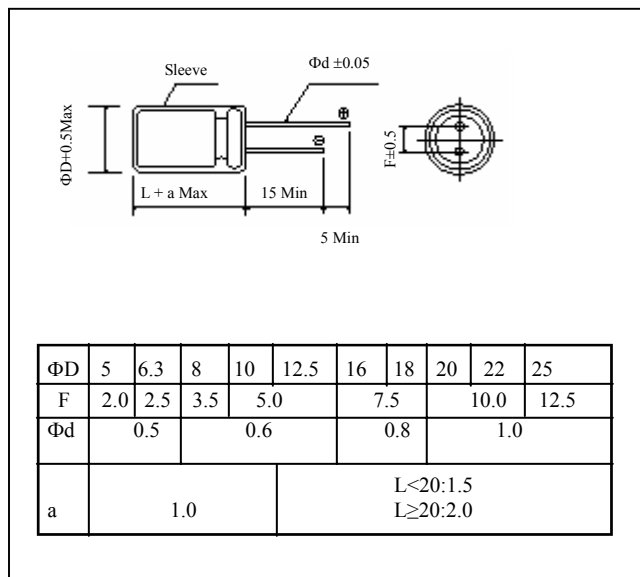


■ SPECIFICATIONS

Item	Characteristics																																															
Operating Temperature Range (°C)	-55~+105(6.3~100V), -40~+105(160~400V), -25~+105(450V)																																															
Rated Voltage Range (V)	63~450																																															
Capacitance Tolerance (25°C, 120Hz)	±20%																																															
Leakage Current (μ A)	Rated Voltage	6.3~100V 160~450V																																														
	—————	0.01CV or 3 whichever is greater (at 25°C after 2 minutes) CV≤1000:0.1 CV+40 or less (after 1 minute) CV≤1000: 0.04 CV+100 or less (after 1 minute)																																														
Dissipation Factor (25°C, 120Hz)	<table border="1"> <thead> <tr> <th>WV (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>160~315</th> <th>350~450</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>											WV (V)	6.3	10	16	25	35	50	63	100	160~315	350~450	tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.25															
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When nominal capacitance is over 1000 μ F tan δ shall be added 0.02 to the listed value with increase of every 1000 μ F																																																
Temperature Stability (120Hz)	<table border="1"> <thead> <tr> <th>Rated 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>160~200</th> <th>200~350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Impedance ratio Z-25°C/Z+20°C</td> <td>5</td> <td>4</td> <td>3</td> <td colspan="3">2</td> <td colspan="2">3</td> <td>4</td> <td>6</td> <td>15</td> </tr> <tr> <td>Z±/Z20(Max)</td> <td>Z-40°C/Z+20°C</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td colspan="2">3</td> <td>4</td> <td>8</td> <td>10</td> <td></td> </tr> </tbody> </table>											Rated voltage (V)	6.3	10	16	25	35	50	63	100	160~200	200~350	400	450	Impedance ratio Z-25°C/Z+20°C	5	4	3	2			3		4	6	15	Z±/Z20(Max)	Z-40°C/Z+20°C	10	8	6	4	3		4	8	10	
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Shelf Life (+105°C)	After leaving capacitors under no load for 500 hours, they meet the specified value for load life characteristics listed above. *After test: (V) to be applied for 30 minutes, 24 to 48 hours before measurement.																																															

■ DIMENSIONS

mm



■ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Rated Voltage(V)	Cap(μ F)	Freq(Hz)				
		50	120	300	1K	≥10 K
6.3~100	~47	0.75	1.00	1.35	1.57	2.00
	100~470	0.80	1.00	1.23	1.34	1.50
	1000~33000	0.80	1.00	1.10	1.13	1.15
	0.47~220	0.80	1.00	1.25	1.40	1.60
160~450	330~1000	0.90	1.00	1.10	1.13	1.15

Temperature coefficient

Rated Voltage (V)	Temperature (°C)		
	+70	+80	+105
6.3~100	2.0	1.7	1.0
160~450	1.8	1.4	1.0

STANDARD SIZE

Cap (μ F)	6.3		10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms
2200	-	-	-	-	-	-	-	-	16x25	1260	16x35.5	1470
3300	-	-	-	-	-	-	16x25	1400	16x35.5	1610	18x35.5	1770
4700	-	-	-	-	16x25	1480	16x31.5	1710	18x35.5	1910	20x40	2100
6800	-	-	16x25	1570	16x35.5	1780	18x35.5	2040	20x40	2150	22x50	2500
10000	16x25	1650	16x35.5	1890	18x35.5	2060	20x40	2150	22x50	2650	25x50	2850
15000	16x35.5	2010	16x35.5	2180	20x40	2430	22x50	2750	25x50	3100	-	-
22000	18x40	2350	20x40	2650	22x50	3000	25x50	3250	-	-	-	-
33000	22x50	2800	22x50	3250	25x50	3450	-	-	-	-	-	-

Cap (μ F)	63		100		160		200		250	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms
22	-	-	-	-	-	-	-	-	-	-
33	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	16x31.5	375	16x31.5	365
220	-	-	-	-	16x35.5	570	18x35.5	575	22x40	600
330	-	-	-	-	18x40	750	20x40	705	22x50	730
470	-	-	16x25	715	22x40	900	22x50	840	25x50	870
1000	16x25	930	26x40	985	25x50	1310	-	-	-	-
2200	18x35.5	1650	22x50	1750	-	-	-	-	-	-
3300	20x40	1950	25x50	2070	-	-	-	-	-	-
4700	22x50	2450	-	-	-	-	-	-	-	-
6800	25x50	2800	-	-	-	-	-	-	-	-

Cap (μ F)	315		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms	Φ DxL (mm)	mArms
22	-	-	-	-	16x25	165	16x25	115
33	16x25	195	16x25	195	16x31.5	215	16x35.5	165
47	16x25	230	16x35.5	270	16x35.5	270	18x40	185
100	18x35.5	395	18x40	420	20x40	450	22x40	270
220	22x50	620	22x50	620	25x50	560	-	-
330	25x50	760	-	-	-	-	-	-

Ripple Current at 105°C, 120Hz

■ TYPICAL CURVES

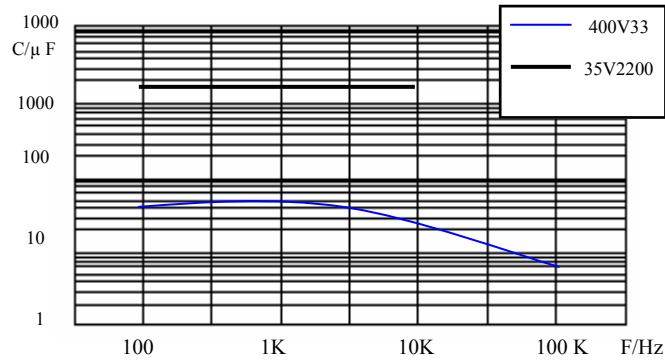


Fig. 1 Typical Capacitances as a function of frequency

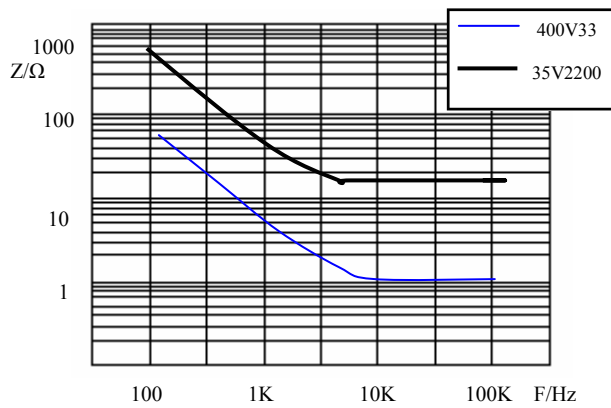


Fig. 2 Typical impedance as a function of frequency