

Features

- 105°C, 1,000 hours assured
- High temperature Category range, with 7mm height
- RoHS Compliance

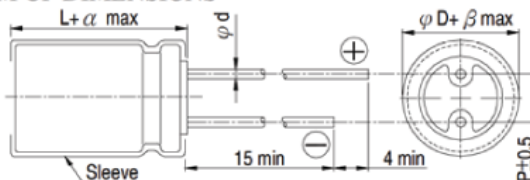


Sleeve & Marking Color: Green & Black

SPECIFICATIONS

Items	Performance																																						
Category Temperature Range	-40℃ ~ +105℃																																						
Capacitance Tolerance	±20% (at 120Hz, 20℃)																																						
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V																																						
Dissipation Factor (Tan δ at 120Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>Tan δ (max)</td><td>0.35</td><td>0.23</td><td>0.20</td><td>0.17</td><td>0.15</td><td>0.12</td><td>0.10</td><td>0.10</td></tr></table>									Rated Voltage	4	6.3	10	16	25	35	50	63	Tan δ (max)	0.35	0.23	0.20	0.17	0.15	0.12	0.10	0.10												
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Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>Impedance</td><td>Z(-25℃)/Z(+20℃)</td><td>6</td><td>4</td><td>3</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Ratio</td><td>Z(-40℃)/Z(+20℃)</td><td>12</td><td>10</td><td>8</td><td>6</td><td>4</td><td>4</td><td>4</td><td>4</td></tr></table>									Rated Voltage		4	6.3	10	16	25	35	50	63	Impedance	Z(-25℃)/Z(+20℃)	6	4	3	3	2	2	2	2	Ratio	Z(-40℃)/Z(+20℃)	12	10	8	6	4	4	4	4
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Endurance	<table><tr><td>Test Time</td><td>1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ±20% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 1,000 hours at 105℃.									Test Time	1,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																						
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Leakage Current	Within specified value																																						
Shelf Life Test	Test time: 500 hours; other items are the same as those for the Endurance.																																						
Ripple Current & Frequency Multipliers	<table><tr><td>Freq.(Hz) Cap.(μ F)</td><td>60 (50)</td><td>120</td><td>500</td><td>1k</td><td>10k up</td></tr><tr><td>Under 47</td><td>0.75</td><td>1.00</td><td>1.20</td><td>1.30</td><td>1.45</td></tr><tr><td>100 to 330</td><td>0.88</td><td>1.00</td><td>1.10</td><td>1.15</td><td>1.20</td></tr></table>									Freq.(Hz) Cap.(μ F)	60 (50)	120	500	1k	10k up	Under 47	0.75	1.00	1.20	1.30	1.45	100 to 330	0.88	1.00	1.10	1.15	1.20												
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DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

ϕD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ϕd	0.45	0.5		
α	1.0			
β	0.5			

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: φD × L(mm)

Ripple Current: mA/rms at 120 Hz, 105°C

V. DC μF	Contents	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
		φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA
0.1	0R1													4×7	2	4×7	2
0.22	R22													4×7	3	4×7	3
0.33	R33													4×7	4	4×7	4.4
0.47	R47													4×7	5	4×7	7.9
1	010													4×7	10	4×7	11
2.2	2R2													4×7	15	4×7	17
3.3	3R3													4×7	18	4×7	21
4.7	4R7											4×7	22	5×7*	23	5×7	26
10	100							4×7	25	4×7	26	5×7*	30	6.3×7*	34	6.3×7	40
22	220			4×7	31	4×7	32	5×7*	39	5×7*	41	6.3×7	47	6.3×7	53	8×7	70
33	330	4×7	32	4×7	32	4×7	35	5×7	43	6.3×7	53	8×7*	71	8×7	76		
47	470	4×7	38	4×7	38	5×7*	47	6.3×7*	59	6.3×7	65	8×7	83	8×7	85		
100	101	5×7	61	6.3×7*	75	6.3×7	80	6.3×7	90	8×7	125						