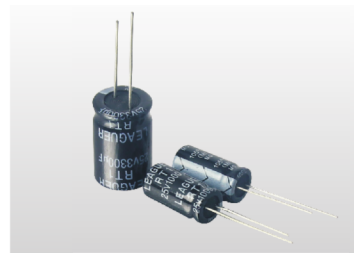


RT1 Series (standard)

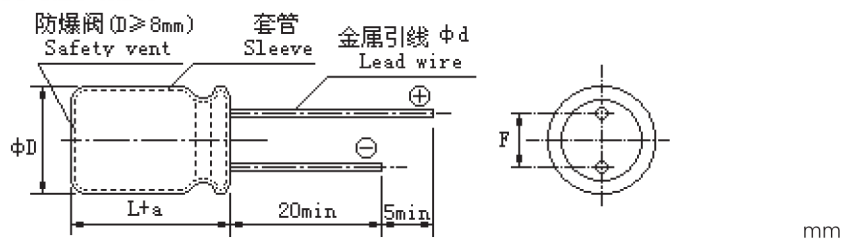
- 体积小, 容量大 • 105°C
- 性能稳定, 符合 RoHS
- Small size, Large capacity • 105°C
- High stability, RoHS Compliance



主要技术性能 Specifications

使用温度范围 Operating Temperature Range	-55 ~ +105°C	-40 ~ +105°C	-25 ~ +105°C																																																								
额定电压范围 Rated Voltage Range	6.3 ~ 100V. DC	160 ~ 400V. DC	450V. DC																																																								
标称电容量允许偏差 Capacitance Tolerance	± 20%(120Hz, 20°C)																																																										
漏电流 Leakage Current	6.3 ~ 100V.DC	160 ~ 450V.DC																																																									
	$I \leq 0.01CV(\mu A)$ 或 $3 \mu A$ 取较大者 (2 分钟) $I \leq 0.01CV$ or $3 \mu A$ Whichever is greater (after 2 minutes)	$CV \leq 1000$ $I = 0.1CV + 40 \mu A$ (1 minute) $I = 0.03CV + 15 \mu A$ (5 minutes)	$CV > 1000$ $I = 0.04CV + 100 \mu A$ (1 minute) $I = 0.02CV + 25 \mu A$ (5 minutes)																																																								
损耗角正切值 Dissipation Factor (120Hz 20°C)	<table border="1"> <tr> <th>W.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</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> <tr> <td>tg 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>0.20</td> <td>0.20</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> </table>														W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	tg δ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.20	0.20	0.25	0.25	0.25															
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容量大于 1000 μF 者, 每增加 1000 μF, 其损耗角正切值增加 0.02 For capacitance exceeding 1000 μF, add 0.02 per increment of 1000 μF																																																											
温度特性 (20Hz) Temperature characteristics Impedance ratio (120Hz)	<table border="1"> <tr> <th>WV</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> <tr> <td>$\frac{Z_{-25^\circ C}}{Z_{20^\circ C}}$</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>4</td> <td>6</td> <td>6</td> <td>7</td> </tr> <tr> <td>$\frac{Z_{-40^\circ C}}{Z_{20^\circ C}}$</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> <td>10</td> <td>-</td> </tr> </table>														WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	$\frac{Z_{-25^\circ C}}{Z_{20^\circ C}}$	5	4	3	2	2	2	2	2	3	3	4	6	6	7	$\frac{Z_{-40^\circ C}}{Z_{20^\circ C}}$	10	8	6	4	3	3	3	3	4	4	8	8	10	-
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$\frac{Z_{-40^\circ C}}{Z_{20^\circ C}}$	10	8	6	4	3	3	3	3	4	4	8	8	10	-																																													
耐久性 Load Life	<p>+105°C 施加带纹波电流的额定电压 1000 小时 ($\Phi D \geq 10$, 2000 小时), 恢复 16 小时后 After applying rated voltage with specified ripple current for 1000 hours ($\Phi D \geq 10$; 2000h) at +105°C and then resumed 16 hours. The capacitor shall meet the following limits.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\leq \pm 25\%$ 初始测量值 $\leq \pm 25\%$ of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>\leq 规定值 \leq The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 $\leq 200\%$ of the specified value</td> </tr> </table>														电容量变化率 Capacitance Change	$\leq \pm 25\%$ 初始测量值 $\leq \pm 25\%$ of Initial measured value	漏电流值 Leakage	\leq 规定值 \leq The specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 $\leq 200\%$ of the specified value																																							
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高温贮存 Shelf Life	<p>+105°C, 1000 小时, 然后按 JISC5101-4 第 4.1 项预处理后测量。 After storage for 1000 hours at +105°C, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JISC5101-4.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\leq \pm 20\%$ 初始测量值 $\leq \pm 20\%$ of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>\leq 规定值 \leq The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 $\leq 200\%$ of the specified value</td> </tr> </table>														电容量变化率 Capacitance Change	$\leq \pm 20\%$ 初始测量值 $\leq \pm 20\%$ of Initial measured value	漏电流值 Leakage	\leq 规定值 \leq The specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 $\leq 200\%$ of the specified value																																							
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外形图及尺寸 Case size table



ΦD±0.5	5	6.3	8	10	12.5 or 13	16	18
L	11	11	11.5	13,16,20	20,25	25,31,36	31,36,40
F±0.5	2.0	2.5	3.5	5.0			7.5
Φd±0.05	0.5			0.6			0.8
a	1.5(WV≤100);2.0(WV>100)					2.0	

RT1 Series (standard)

■ 标称电容量、额定电压、额定纹波电流及外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV mA μF	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)	
	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA
0.47 (R47)												5×11	7	
1.0 (010)												5×11	13	
2.2 (2R2)												5×11	20	
3.3 (3R3)												5×11	25	
4.7 (4R7)												5×11	32	
10 (100)												5×11	47	5×11 48
22 (220)									5×11 64		5×11 70	5×11 80		
33 (330)							5×11 69		5×11 77		5×11 94	6.3×11 100		
47 (470)					5×11 80		5×11 84		5×11 100		6.3×11 115	6.3×11 140		
100 (101)	5×11 96		5×11 105		5×11 130		5×11 135		6.3×11 170		8×11.5 200	8×11.5 230		
220 (221)	5×11 160		5×11 165		6.3×11 220		6.3×11 240		8×11.5 300		10×12 360	10×16 390		
330 (331)	6.3×11 210		6.3×11 235		6.3×11 270		8×11.5 335		10×12 400		10×16 470	10×20 540		
470 (471)	6.3×11 275		6.3×11 295		8×11.5 375		8×11.5 440		10×12 525		10×20 600	12.5×20 700		
680 (681)	6.3×11 285		8×11.5 430		8×11.5 480		10×12 630		10×16 760		12.5×20 980	12.5×25 800		
1000 (102)	8×11.5 460		8×11.5 500		10×12 640		10×16 740		10×20 865		12.5×25 1060	16×25 1200		
2200 (222)	10×16 775		10×16 860		10×20 1050		12.5×20 1090		16×25 1370		16×31 1600	18×31 1400		
3300 (332)	10×20 985		10×20 1100		12.5×20 1300		16×25 1500		16×25 1680		18×36 1780			
4700 (472)	12.5×20 1150		12.5×20 1350		12.5×25 1650		16×25 1800		16×36 1870					
6800 (682)	12.5×25 1480		16×25 1700		16×25 1900		16×36 1910		18×36 1920					
10000 (103)	16×25 1700		16×25 1950		16×31 1950		18×36 2050							
15000 (153)	16×31 2090		16×36 2090		18×36 2070									
22000 (223)	18×31 2280		18×36 2180											
33000 (333)	18×40 2350													

WV mA μF	100 (2A)		160 (2C)		200 (2D)		250 (2E)		350 (2V)		400 (2G)		450 (2W)	
	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA	ΦD×L	I~mA
0.47 (R47)	5×11	8					6.3×11	8	6.3×11	8				
1.0 (010)	5×11	15					6.3×11	16	6.3×11	16	6.3×11	16	6.3×11	15
2.2 (2R2)	5×11	21					6.3×11	30	6.3×11	25	8×11.5	31	8×11.5	20
3.3 (3R3)	5×11	30			6.3×11	36	6.3×11	30	8×11.5	30	8×11.5	34	10×12	33
4.7 (4R7)	5×11	35	6.3×11	43	6.3×11	40	8×11.5	45	8×11.5	45	10×12	42	10×12	35
10 (100)	5×11	60	8×11.5	77	8×11.5	57	10×12	90	10×16	95	10×16	64	10×20	37
22 (220)	6.3×11	98	10×12	92	10×16	105	10×16	105	12.5×20	175	12.5×20	140	12.5×25	100
33 (330)	8×11.5	140	10×16	125	10×20	140	10×20	140	12.5×25	220	16×25	170	16×25	125
47 (470)	8×11.5	185	10×20	150	10×20	195	12.5×20	190	16×25	260	16×25	200	16×31	155
100 (101)	10×16	290	12.5×25	320	16×25	340	16×25	310	18×31	370	18×36	310	18×40	200
220 (221)	12.5×20	560	16×31	410	16×36	580	18×36	485						
330 (331)	12.5×25	690	18×31	570	18×40	675								
470 (471)	16×25	880	18×40	855										
680 (681)	16×31	900												
1000 (102)	18×36	985												

I~ 额定纹波电流 Rated ripple current: (mA,105°C,120Hz)