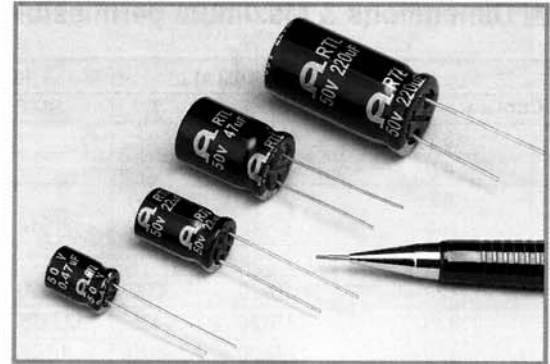


RTL SERIES

Superior in Reliability, Radial Leads

Features

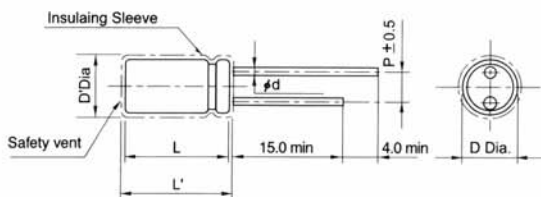
- Extended Operating temperature range (-40°C ~ +125°C)
Radial (Equivalent to 16000 hours life at 85°C)
- very low leakage current
- Low impedance value at high frequency
- Low dissipation factor



Specifications

Item	Performance Characteristics																					
Operating temperature range	-40°C ~ +125°C																					
Rated working voltage range	10V ~ 250V																					
Nominal capacitance range	0.47μF ~ 1000μF, -10%~+50%(at 20°C, 120Hz)																					
D.C Leakage current(at 20°C)	The following specifications shall be satisfied when the rated voltage is applied for the required time. $I = 0.002CV$ or $2\mu A$ (5 min) at 10~100V, whichever is greater $I = 0.002CV + 10\mu A$ (5 min) at 160~250V Where I =Leakage current(μA) C=Nominal capacitance(μF) V=Rated voltage(V)																					
Tan δ (max., at 20°C, 120Hz)	<table border="1"> <thead> <tr> <th>W.V(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50~100</th> <th>160~250</th> </tr> </thead> <tbody> <tr> <td>Tan δ</td> <td>0.20</td> <td>0.17</td> <td>0.17</td> <td>0.12</td> <td>0.10</td> <td>0.20</td> </tr> </tbody> </table>	W.V(V)	10	16	25	35	50~100	160~250	Tan δ	0.20	0.17	0.17	0.12	0.10	0.20							
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Characteristics at low temperature(max.) (impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>W.V(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35~100</th> <th>50~100</th> <th>160~250</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z20°C</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z20°C</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	W.V(V)	10	16	25	35~100	50~100	160~250	Z-25°C/Z20°C	2	2	2	2	2	2	Z-40°C/Z20°C	8	6	5	4	4	4
W.V(V)	10	16	25	35~100	50~100	160~250																
Z-25°C/Z20°C	2	2	2	2	2	2																
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Load life	After applying rated working voltage for 1000 hours at +125°C and then being stabilized at +20°C, capacitors shall meet following limits. <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within ± 15% of the initial measured value</td> </tr> <tr> <td>Tan δ</td> <td>≤ 150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </tbody> </table>	Capacitance change	Within ± 15% of the initial measured value	Tan δ	≤ 150% of the initial specified value	Leakage current	≤ The initial specified value															
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Dimensions



Standard lead style

φD	8.0	10.0	12.5	16.0	18.0
p	3.5	5.0		7.5	
φd	0.6		0.8		

D' = [D+0.5]Max.

L' = [L+1.0]Max. at D ≤ 8.0

L' = [L+1.5]Max. at D ≥ 10.0

Ripple current coefficient

Frequency

Cap(μF) \ Freq(Hz)	50	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

Temperature

Temperature	≤ 85°C	105°C	125°C
Factor	2.0	1.4	1.0

RTL SERIES

▣ Dimensions & Maximum permissible ripple current

 ϕ D x L(mm)

Cap(μ F)	W.V	10(1A)		16(1C)		25(1E)		35(1V)		50(1H)	
		SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
0.47										8 x 11.5	11
1.0										8 x 11.5	17
2.2										8 x 11.5	25
3.3										8 x 11.5	31
4.7										8 x 11.5	37
10										8 x 11.5	59
22								8 x 11.5	99	10 x 16	102
33						8 x 11.5	101			10 x 20	172
47				8 x 11.5	136			10 x 16	187	12.5 x 20	240
100		8 x 16	176			10 x 20	300			12.5 x 25	351
220				12.5 x 20	473	12.5 x 25	513	16 x 25	590	16 x 31.5	633
330		12.5 x 20	488	12.5 x 25	576	16 x 25	720	16 x 31.5	776		
470		12.5 x 25	576	16 x 25	790	16 x 31.5	924	16 x 35.5	1040		
1000		16 x 31.5	1034								

Cap(μ F)	W.V	63(1J)		100(2A)		160(2C)		200(2D)		250(2E)	
		SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
0.47		8 x 11.5	11								
1.0		8 x 11.5	17			8 x 11.5	20			10 x 16	30
2.2		8 x 11.5	25	8 x 16	32			10 x 16	38	10 x 20	45
3.3		8 x 11.5	31	10 x 16	39	10 x 16	43	10 x 20	54	10 x 20	67
4.7		8 x 11.5	37	10 x 16	51	10 x 20	60	10 x 20	75	12.5 x 25	93
10		8 x 11.5	59	10 x 20	94	12.5 x 20	110	12.5 x 25	130	16 x 25	155
22		10 x 16	102	12.5 x 25	178	16 x 25	185	16 x 31.5	200		
33		10 x 20	172	16 x 25	246	16 x 35.5	250				
47		12.5 x 20	240	16 x 31.5	336						
100		12.5 x 25	351								
220		16 x 31.5	633								

 I_R: Maximum permissible ripple current[mA(rms) at 125°C, 120Hz]