

## RLD Series

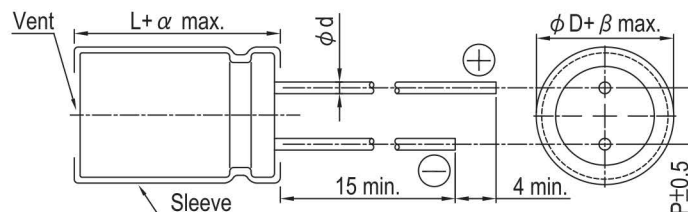
### Features

- 105°C, 12,000 hours assured
- 10 φ ~ 18 φ with large permissible ripple current
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS compliance

### Specifications

Items	Performance																												
Category Temperature Range	160 ~ 400V	450V																											
	-40°C ~ +105°C	-25°C ~ +105°C																											
Capacitance Tolerance	±20% (at 120 Hz, 20°C)																												
Leakage Current (at 20°C)	<table border="1"> <thead> <tr> <th>Time</th> <th colspan="2">after 5 minutes</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Leakage Current</td> <td>CV ≤ 1,000</td> <td>CV &gt; 1,000</td> </tr> <tr> <td>I = 0.03CV + 15(μA)</td> <td>I = 0.02CV + 25(μA)</td> </tr> </tbody> </table>		Time	after 5 minutes		Leakage Current	CV ≤ 1,000	CV > 1,000	I = 0.03CV + 15(μA)	I = 0.02CV + 25(μA)																			
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Where, C = rated capacitance in μF, V = rated DC working voltage in V																													
Tanδ (at 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Tanδ (max)</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>						Rated Voltage	160	200	250	350	400	450	Tanδ (max)	0.20	0.20	0.20	0.24	0.24	0.24									
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Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.																												
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Ripple Current and Frequency Multipliers	<table border="1"> <thead> <tr> <th>Cap. (μF)</th> <th colspan="4">Frequency (Hz)</th> </tr> <tr> <th></th> <th>120</th> <th>1k</th> <th>10k</th> <th>100k up</th> </tr> </thead> <tbody> <tr> <td>15 ~ 82</td> <td>1.00</td> <td>1.75</td> <td>2.25</td> <td>2.50</td> </tr> <tr> <td>100 ≤</td> <td>1.00</td> <td>1.67</td> <td>2.05</td> <td>2.25</td> </tr> </tbody> </table>					Cap. (μF)	Frequency (Hz)					120	1k	10k	100k up	15 ~ 82	1.00	1.75	2.25	2.50	100 ≤	1.00	1.67	2.05	2.25				
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### Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

	10	12.5	16	18
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6		0.8	
α	2.0			
β	0.5			

### Dimension and Permissible Ripple Current

Dimension:  $\phi D \times L$ (mm)  
Ripple Current: mA/rms at 105°C

Cap. (μF)	160V (2C)			200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz
22													10×25	215	538
27										10×25	240	600	10×35	270	675
33										10×35	300	750	10×40	310	775
47							10×25	315	788	12.5×30	450	1,125	12.5×25	355	888
56				10×25	345	863	12.5×25	460	1,150	10×45	385	963	10×50	400	1,000
68	10×25	375	938	10×35	425	1,063	12.5×25	510	1,275	12.5×40	595	1,488	12.5×40	540	1,350
82	10×30	445	1,113	12.5×25	565	1,413	10×45	515	1,288	16×25	565	1,413	18×25	580	1,450
100	10×35	520	1,170	10×45	565	1,271	12.5×30	590	1,475	12.5×35	625	1,613	12.5×45	620	1,550
120	10×40	595	1,339	12.5×30	660	1,485	10×50	585	1,316	12.5×40	795	1,789	16×45	785	1,766
150	10×50	715	1,609	12.5×35	765	1,721	12.5×35	700	1,575	16×25	755	1,699	18×35.5	790	1,778
180	16×25	920	2,070	16×25	840	1,890	12.5×45	920	2,070	18×31.5	670	1,675	16×40	880	1,980
220	16×31.5	1,100	2,475	16×25	995	2,239	18×25	950	2,138	18×25	865	1,946	18×40	985	2,216
270	18×25	1,050	2,363	18×25	950	2,138	16×35.5	1,015	2,284	18×45	1,090	2,453	18×45	1,000	2,250
330	16×35.5	1,240	2,790	18×31.5	1,135	2,554	16×40	1,160	2,610	18×50	1,220	2,745			
390	18×31.5	1,255	2,824	18×31.5	1,135	2,554	18×31.5	1,135	2,554						
470	16×40	1,420	3,195	16×40	1,280	2,880	16×50	1,330	2,993						
560	18×35.5	1,435	3,229	18×35.5	1,300	2,925	18×40	1,320	2,970						
	16×45	1,575	3,544	16×50	1,470	3,308	18×45	1,485	3,341						
	18×40	1,590	3,578	18×40	1,510	3,398	18×50	1,625	3,656						
	16×50	1,760	3,960												
	18×45	1,770	3,983												
	18×50	1,945	4,376												

Cap. (μF)	450V (2W)		
	$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz
15	10×25	185	463
22	10×35	250	625
27	10×40	290	725
33	12.5×25	340	850
47	12.5×30	400	1,000
56	12.5×40	525	1,313
68	16×25	500	1,250
82	12.5×50	605	1,513
100	16×31.5	585	1,463
120	16×35.5	660	1,650
	18×31.5	660	1,650
	16×45	760	1,900
	18×35.5	755	1,888
	16×50	855	1,924
	18×40	845	1,901
	18×45	945	2,126

### Part Numbering System

RLD Series    15 μF    ±20%    450V    Bulk Package    Flat Type    10  $\phi$  ×25L    Pb-free and PET sleeve

**RLD**    **150**    **M**    **2W**    **BK**    **F**    **1025**    **S**

Series Name    Capacitance    Capacitance Tolerance    Rated Voltage    Lead Configuration and Package    Rubber Type    Case Size    Lead Wire and Sleeve type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 13.

Radial