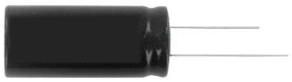
RLD Series

Features

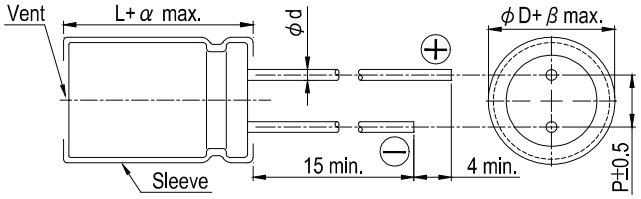
- 105℃, 12,000 hours assured
- 10φ ~ 18φ with large permissible ripple current
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS compliance



Specifications

Items	Performance						
Category Temperature Range	160 ~ 400V					450V	
	-40℃ ~ +105℃					-25℃ ~ +105℃	
Capacitance Tolerance	±20% (at 120 Hz, 20℃)						
Leakage Current (at 20℃)	Time: after 5 minutes Leakage Current: CV ≦ 1,000 I = 0.03CV+15(μA); CV > 1,000 I = 0.02CV+25(μA) Where, C = rated capacitance in μF, V = rated DC working voltage in V						
Tanδ (at 120 Hz, 20℃)	Rated Voltage: 160 / 200 / 250 / 350 / 400 / 450 Tanδ (max): 0.20 / 0.20 / 0.20 / 0.24 / 0.24 / 0.24						
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.						
	Rated Voltage		160	200	250	350	400	450
	Impedance Ratio	Z(-25℃)/Z(+20℃)	3	3	3	5	5	6
		Z(-40℃)/Z(+20℃)	6	6	6	6	6	-
Endurance	Test Time: 12,000 Hrs Capacitance Change: Within ±20% of initial value Tanδ: Less than 200% of specified value Leakage Current: Within specified value * The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 12,000 hours at 105°C.						
Shelf Life Test	Test Time: 1,000 Hrs Capacitance Change: Within ±20% of initial value Tanδ: Less than 200% of specified value Leakage Current: Less than 500% of specified value * The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).						
Ripple Current and Frequency Multipliers	Frequency (Hz) / Cap. (μF)		120	1k	10k	100k up	
	15 ~ 82		1.00	1.75	2.25	2.50	
	100 ≦		1.00	1.67	2.05	2.25	

Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

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: ϕD × L(mm)
Ripple Current: mA/rms at 105°C

Rated Volt. (VDC) / Contents Cap.(μF)	160V (2C)			200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	ϕD×L	Ripple Current		ϕD×L	Ripple Current		ϕD×L	Ripple Current		ϕD×L	Ripple Current		ϕD×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 12.5×25	310 355	775 888
47							10×25	315	788	12.5×30 10×45	450 385	1,125 963	10×50 12.5×35	400 480	1,000 1,200
56				10×25	345	863	12.5×25	460	1,150	10×50 12.5×35	440 525	1,100 1,313	12.5×40 16×25	540 515	1,350 1,288
68	10×25	375	938	10×35	425	1,063	10×35 12.5×25	430 510	1,075 1,275	12.5×40 16×25	595 565	1,488 1,413	18×25 12.5×45	580 620	1,450 1,550
82	10×30	445	1,113	12.5×25	565	1,413	10×45 12.5×30	515 590	1,288 1,475	12.5×45 16×31.5	675 670	1,688 1,675	16×35.5	685	1,713
100	10×35	520	1,170	10×45 12.5×30	565 660	1,271 1,485	10×50 12.5×35	585 700	1,316 1,575	16×35.5	755	1,699	16×40 18×35.5	785 790	1,766 1,778
120	10×40 12.5×25	595 680	1,339 1,700	10×50 12.5×35	640 765	1,440 1,721	12.5×40 16×25	795 755	1,789 1,699	16×45 18×31.5	870 840	1,958 1,890	16×50 18×40	890 880	2,003 1,980
150	10×50 12.5×35	715 850	1,609 1,913	12.5×40 16×25	880 840	1,980 1,890	12.5×45 18×25	920 865	2,070 1,946	18×40	985	2,216	18×45	1,000	2,250
180	16×25	920	2,070	16×31.5 18×25	995 950	2,239 2,138	16×35.5	1,015	2,284	18×45	1,090	2,453			
220	16×31.5 18×25	1,100 1,050	2,475 2,363	16×35.5 18×31.5	1,125 1,135	2,531 2,554	16×40 18×31.5	1,160 1,135	2,610 2,554	18×50	1,220	2,745			
270	16×35.5 18×31.5	1,240 1,255	2,790 2,824	16×40 18×35.5	1,280 1,300	2,880 2,925	16×50 18×40	1,330 1,320	2,993 2,970						
330	16×40 18×35.5	1,420 1,435	3,195 3,229	16×50 18×40	1,470 1,510	3,308 3,398	18×45	1,485	3,341						
390	16×45 18×40	1,575 1,590	3,544 3,578	18×45	1,610	3,623	18×50	1,625	3,656						
470	16×50 18×45	1,760 1,770	3,960 3,983												
560	18×50	1,945	4,376												

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

Part Numbering System

RLD Series	15 μF	±20%	450V	Bulk Package	Flat Type	10ϕ×25L	
RLD	**150**	**M**	**2W**	**BK**	**F**	**1025**	**XX**
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	

S = Standard
KS = AEC-Q200 Qualified, Safety Critical Application
LS = AEC-Q200 Qualified, Non-Safety Critical Application

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