

RLD-USB



USB Type, 6 V / 16V

Standard

UL 1434 1st Edition
CSA C22.2 No. 0 CSA TIL No. CA-3A

Approvals

cULus Recognition
TÜV

Features

This new radial leaded products are designed specifically for Universal Serial Bus (USB) applications with low resistance, faster time-to-trip and low voltage drop features.

Specifications

Packaging

A* bulk
G tape and reel
F* tape and ammo
* preferred type

Materials

Insulating Material: Yellow Epoxy Polymer,
UL 94 V-0

Round Pins: Copper alloy, tin plated

Max. Device Surface Temperature in Tripped State
125 °C

Operating / Storage Temperature

-40 °C to +85 °C (consider derating)

Humidity Ageing

+85 °C, 85% R.H., 1000 hours, ± 5 % typical
resistance change

Soldering Characteristics

Solderability per MIL-STD-202, Method 208E

Thermal Shock

MIL-STD-202F, Method 107G

+125 °C to -40 °C 10 times, ±5 % typical resistance
change

Solvent Resistance

MIL-STD-202, Method 215F, no change

Marking

"P", voltage, amperage rating, lot number

Dimensions (mm)

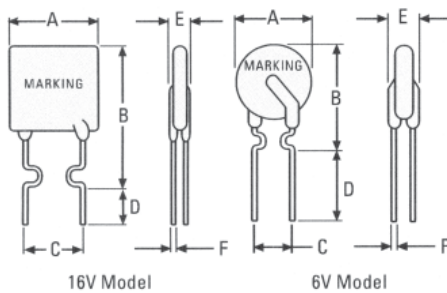


Figure 1

Figure 2



Dimensions (mm)										
Model	Fig.	A Max	B Max	C typ	D Min	E Max	Physical Characteristics		packaging quantity	
							Lead	Material	bag	ammo
RLD06P075B	2	6.9	11.4	5.1	7.6	3.0	0.51 dia.	Sn/Cu	500	2,000
RLD06P120B	2	6.9	11.7	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD06P155B	2	6.9	11.7	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P090B	1	7.4	12.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P110B	1	7.4	14.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P135B	1	8.9	13.5	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P160B	1	8.9	15.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P185B	1	10.2	15.7	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD16P250B	1	11.4	18.3	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000

Permissible continuous operating current is ≤ 100 % at ambient temperature of 20 °C (68 °F).										
Model	I _{hold} (A)	I _{trip} (A)	V _{max, dc} (V)	I _{max} (A)	max. time to trip (s @ A)	P _{d max} (W)	Resistance		Approvals	
							R _{min} ()	R _{I max} ()	cULus	TÜV
RLD06P075B	0.75	1.30	6	40	0.40 @ 8.00	0.3	0.100	0.230	•	•
RLD06P120B	1.20	2.00	6	40	0.50 @ 8.00	0.6	0.065	0.140	•	•
RLD06P155B	1.55	2.70	6	40	0.60 @ 8.00	0.6	0.040	0.100	•	•
RLD16P090B	0.90	1.80	16	40	5.90 @ 4.50	0.6	0.070	0.180	•	•
RLD16P110B	1.10	2.20	16	40	6.60 @ 5.50	0.7	0.050	0.140	•	•
RLD16P135B	1.35	2.70	16	40	7.30 @ 6.75	0.8	0.040	0.120	•	•
RLD16P160B	1.60	3.20	16	40	8.00 @ 8.00	0.9	0.030	0.110	•	•
RLD16P185B	1.85	3.70	16	40	8.70 @ 9.25	1.0	0.030	0.090	•	•
RLD16P250B	2.50	5.00	16	40	10.3 @ 12.5	1.2	0.020	0.060	•	•

NOTE:

I_{hold} = Hold current: maximum current device will pass without tripping in 20 °C still air.
I_{trip} = Trip current: minimum current at which the device will trip in 20 °C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max})
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max})

P_d =

Power dissipated from device when in the tripped state at 20 °C still air.

R_{min} =

Minimum resistance of device in initial (un-soldered) state.

R_{I max} =

Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.

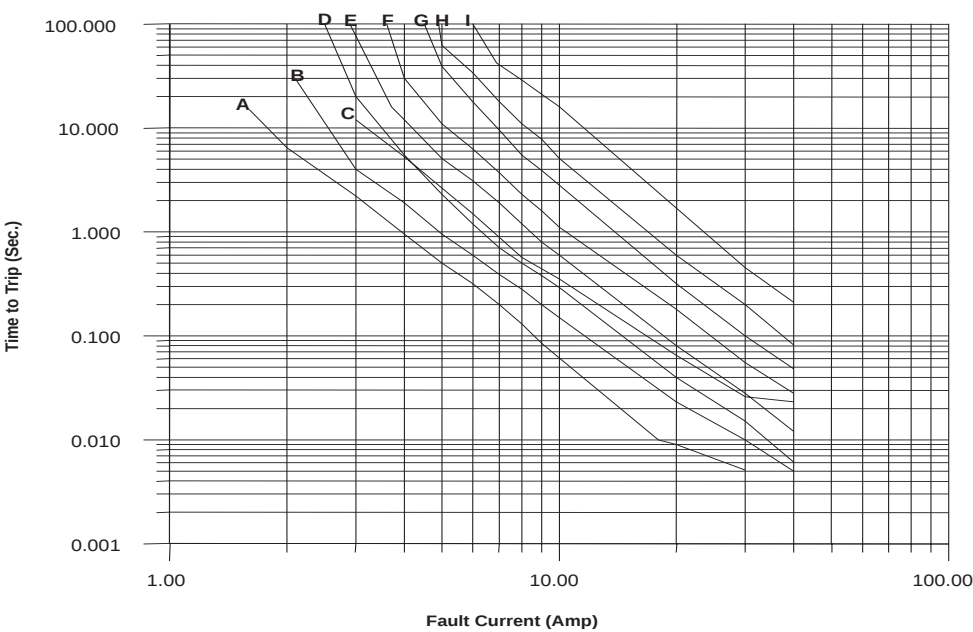
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.
Specifications are subject to change without notice

Order
Information

Qty.	Order- Number	Model	*	Packaging

* optional "F" for lead free devices

RLD-USB



Thermal Derating Chart

Model	Ambient Operation Temperature - I _{hold} (A)								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
RLD06P075B	1.05	0.95	0.85	0.75	0.65	0.60	0.55	0.50	0.43
RLD06P120B	1.69	1.52	1.36	1.20	1.04	0.96	0.88	0.80	0.68
RLD06P155B	2.17	1.96	1.75	1.55	1.34	1.24	1.13	1.03	0.88
RLD16P090B	1.31	1.17	1.04	0.90	0.75	0.69	0.61	0.55	0.47
RLD16P110B	1.60	1.43	1.27	1.10	1.00	0.92	0.75	0.67	0.57
RLD16P135B	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.70
RLD16P160B	2.32	2.08	1.84	1.60	1.33	1.23	1.09	0.98	0.83
RLD16P185B	2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
RLD16P250B	3.63	3.25	2.88	2.50	2.08	1.93	1.70	1.53	1.30