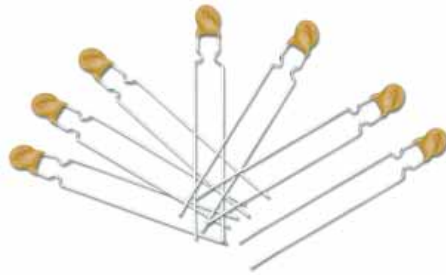


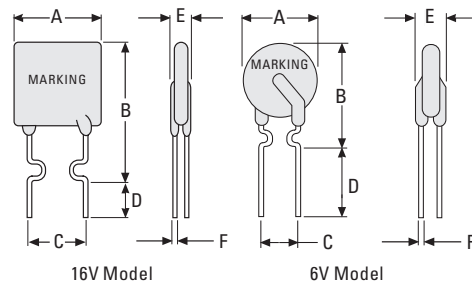
RLD-USB / No. 709

Radial Leaded, USB-Type

Specifications



Dimensions (mm)



Approvals

cULus Recognized: pending
TÜV: pending

Features

Overcurrent protection specifically designed for Universal Serial Bus (USB) applications
Very low resistance
Very fast trip times
Optimized protection for low and high power hub ports

WebLinks

Data Sheet

www.wickmannusa.com/products/709.pdf

Packaging

www.wickmannusa.com/pack

Packaging

00: Bulk (Qty.: see table below)
02: Tape/Ammopack (Qty.: see table below)

Materials

Insulating Mat.: Cured Epoxy Polymer, UL 94V0
Round Pins: Copper alloy, tin plated

Device Surface Temperature in Tripped State

125°C Max.

Operating / Storage Temperature

-40°C to +85°C (see de-rating table)

Humidity Ageing

+85°C, 85% RH, 1000 hrs., ± 5% typical resistance change

Passive Ageing

+85°C, 1000 hrs., ± 5% typical resistance change

Thermal Shock

+125°C to -40°C, 10 times, ±5% typical resistance change (MIL-STD-202F, Method 107G)

Solvent Resistance

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

Solderability

260°C, ≤ 3 sec. (MIL-STD-202, Method 208E)

Marking

"P", Voltage, Current Code, Lot Number



Dimensions Legend							Packaging Quantity	
Rating	A (max.)	B (max.)	C (typ.)	D (min.)	E (max.)	F (Ø)	Bulk	Tape
750 mA / 6V	6.9	11.4	5.1	7.6	3.0	0.51	500	2000
900 mA / 16V	7.4	12.2	5.1	7.6	3.0	0.51	500	1
1.10 A / 16V	7.4	14.2	5.1	7.6	3.0	0.51	500	1
1.20 A / 6V	6.9	11.7	5.1	7.6	3.0	0.51	500	2000
1.35 A / 16V	8.9	13.5	5.1	7.6	3.0	0.51	500	1
1.55 A / 6V	6.9	11.7	5.1	7.6	3.0	0.51	500	2000
1.60 A / 16V	8.9	15.2	5.1	7.6	3.0	0.51	500	1
1.85 A / 16V	10.2	15.7	5.1	7.6	3.0	0.51	500	1
2.50 A / 16V	11.4	18.3	5.1	7.6	3.0	0.51	500	1

¹ contact WICKMANN

Permissible continuous operating current is ≤ 100% at ambient temperature of 20°C (68°F).											
Hold Current I_{hold}	Model Code	Trip Current I_{trip} (A)	Voltage Rating (Vdc)	max. Fault Current I_{max} (A)	max. Power Dissipation P_d (W)	max. Time-to-trip (A) (s)		Resistance R_{min} min. (Ω) R_{1max} max. (Ω)		Model	Approvals $cULus$ TUV
750mA	07500	1.30	6	40	0.3	8.00	0.4	0.100	0.230	RLD06P075B	P P
900mA	09001	1.80	16	40	0.6	4.50	5.9	0.070	0.180	RLD16P090B	P P
1.10A	11101	2.20	16	40	0.7	5.50	6.6	0.050	0.140	RLD16P110B	P P
1.20A	11200	2.00	6	40	0.6	8.00	0.5	0.065	0.140	RLD06P120B	P P
1.35A	11351	2.70	16	40	0.8	6.75	7.3	0.040	0.120	RLD16P135B	P P
1.55A	11550	2.70	6	40	0.6	8.00	0.6	0.040	0.100	RLD06P155B	P P
1.60A	11601	3.20	16	40	0.9	8.00	8.0	0.030	0.110	RLD16P160B	P P
1.85A	11851	3.70	16	40	1.0	9.25	8.7	0.030	0.090	RLD16P185B	P P
2.50A	12501	5.00	16	40	1.2	12.50	10.3	0.020	0.060	RLD16P250B	P P

P = pending

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_{1max} = Maximum resistance of device at 20°C measured one hour after tripping.

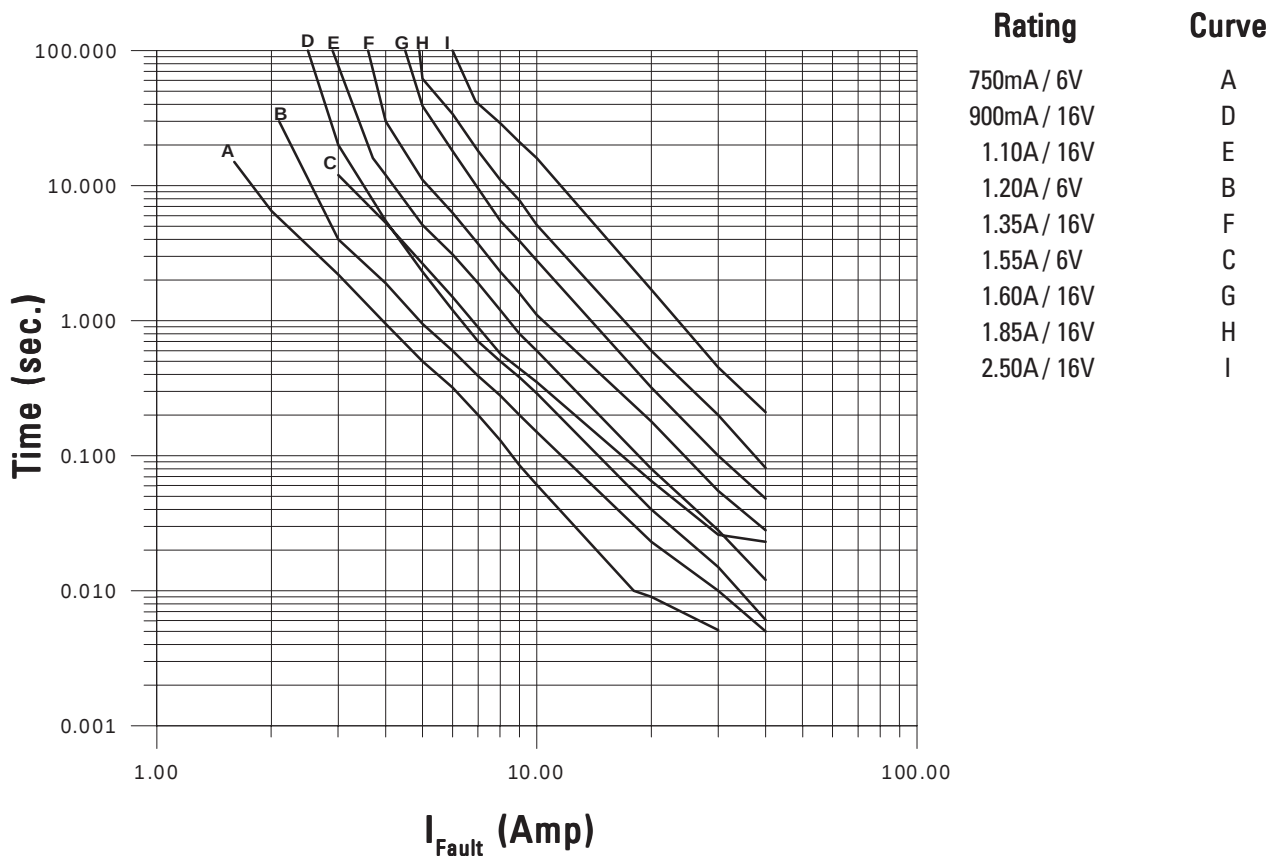
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame. Specifications are subject to change without notice.

Order Information

Qty.	Order-Number	Series	Model Code	Packaging
		709		

RLD-USB / No. 709

Time-to-trip Characteristics



Thermal Derating Chart

Rating	I _{hold} (Amp) / Ambient Operating Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
750mA / 6V	1.05	0.95	0.85	0.75	0.65	0.60	0.55	0.50	0.43
900mA / 16V	1.31	1.17	1.04	0.90	0.75	0.69	0.61	0.55	0.47
1.10A / 16V	1.60	1.43	1.27	1.10	1.00	0.92	0.75	0.67	0.57
1.20A / 6V	1.69	1.52	1.36	1.20	1.04	0.96	0.88	0.80	0.68
1.35A / 16V	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.70
1.55A / 6V	2.17	1.96	1.75	1.55	1.34	1.24	1.13	1.03	0.88
1.60A / 16V	2.32	2.08	1.84	1.60	1.33	1.23	1.09	0.98	0.83
1.85A / 16V	2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
2.50A / 16V	3.63	3.25	2.88	2.50	2.08	1.93	1.70	1.53	1.30