

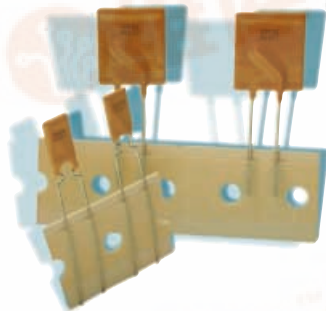
POLYFUSE® RESETTABLE FUSES



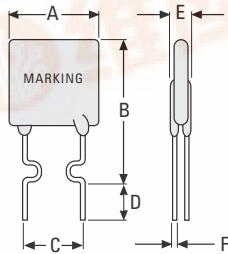
No. RLD30

Radial Leaded, 30V

Specifications



Dimensions (mm)



Standard

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

Approvals

cULus Recognized: File No. E 191571
TÜV: File No. R 50017428

Features

Low voltage (30Vdc) overcurrent protection
Low resistance and power dissipation
High hold currents
Low trip-to-hold current ratios
Internationally approved
Wide range of applications, including general electronics, computers, peripherals and automotive electronics

WebLinks

Data Sheet - latest version

www.wickmannusa.com/products/rld30.pdf

Approval Certificates

www.wickmannusa.com/approvals

Packaging

www.wickmannusa.com/pack

Packaging Code and Info

A: Bulk (Qty.: see table below)
F: 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

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

Solvent Resistance

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

Solderability

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

Marking

"P", Voltage, Current Code, Lot Code



Dimensions Legend							Packaging Quantity	
Rating	A (max.)	B (max.)	C (typ.)	D (min.)	E (max.)	F (Ø)	Bulk	Tape
900 mA / 30V	7.4	12.2	5.1	7.6	3.0	0.51	500	2000
1.10 A / 30V	7.4	14.2	5.1	7.6	3.0	0.51	500	2000
1.35 A / 30V	8.9	13.5	5.1	7.6	3.0	0.51	500	2000
1.60 A / 30V	8.9	15.2	5.1	7.6	3.0	0.51	500	2000
1.85 A / 30V	10.2	15.7	5.1	7.6	3.0	0.51	500	2000
2.50 A / 30V	11.4	18.3	5.1	7.6	3.0	0.51	500	2000
3.00 A / 30V	11.4	17.3	5.1	7.6	3.0	0.81	500	2000
4.00 A / 30V	14.0	20.1	5.1	7.6	3.0	0.81	100	1000
5.00 A / 30V	14.0	24.9	10.2	7.6	3.0	0.81	100	1000
6.00 A / 30V	16.5	24.9	10.2	7.6	3.0	0.81	100	1000
7.00 A / 30V	19.1	26.7	10.2	7.6	3.0	0.81	100	1000
8.00 A / 30V	21.6	29.2	10.2	7.6	3.0	0.81	100	1000
9.00 A / 30V	24.1	29.7	10.2	7.6	3.0	0.81	100	1000

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		Resistance		Approvals cULus TÜV
						(A)	(s)	R_{min} min. (Ω)	R_{max} max. (Ω)	
900mA	P090U	1.80	30	40	0.6	4.50	5.9	0.070	0.220	••
1.10A	P110U	2.20	30	40	0.7	5.50	6.6	0.050	0.170	••
1.35A	P135U	2.70	30	40	0.8	6.75	7.3	0.040	0.130	••
1.60A	P160U	3.20	30	40	0.9	8.00	8.0	0.030	0.110	••
1.85A	P185U	3.70	30	40	1.0	9.25	8.7	0.020	0.090	••
2.50A	P250U	5.00	30	40	1.2	12.50	10.3	0.020	0.070	••
3.00A	P300U	6.00	30	40	2.0	15.00	10.8	0.010	0.080	••
4.00A	P400U	8.00	30	40	2.5	20.00	12.7	0.010	0.050	••
5.00A	P500U	10.00	30	40	3.0	25.00	14.5	0.005	0.050	••
6.00A	P600U	12.00	30	40	3.5	30.00	16.0	0.005	0.040	••
7.00A	P700U	14.00	30	40	3.8	35.00	17.5	0.005	0.030	••
8.00A	P800U	16.00	30	40	4.0	40.00	18.8	0.005	0.020	••
9.00A	P900U	18.00	30	40	4.2	40.00	20.0	0.005	0.020	••

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

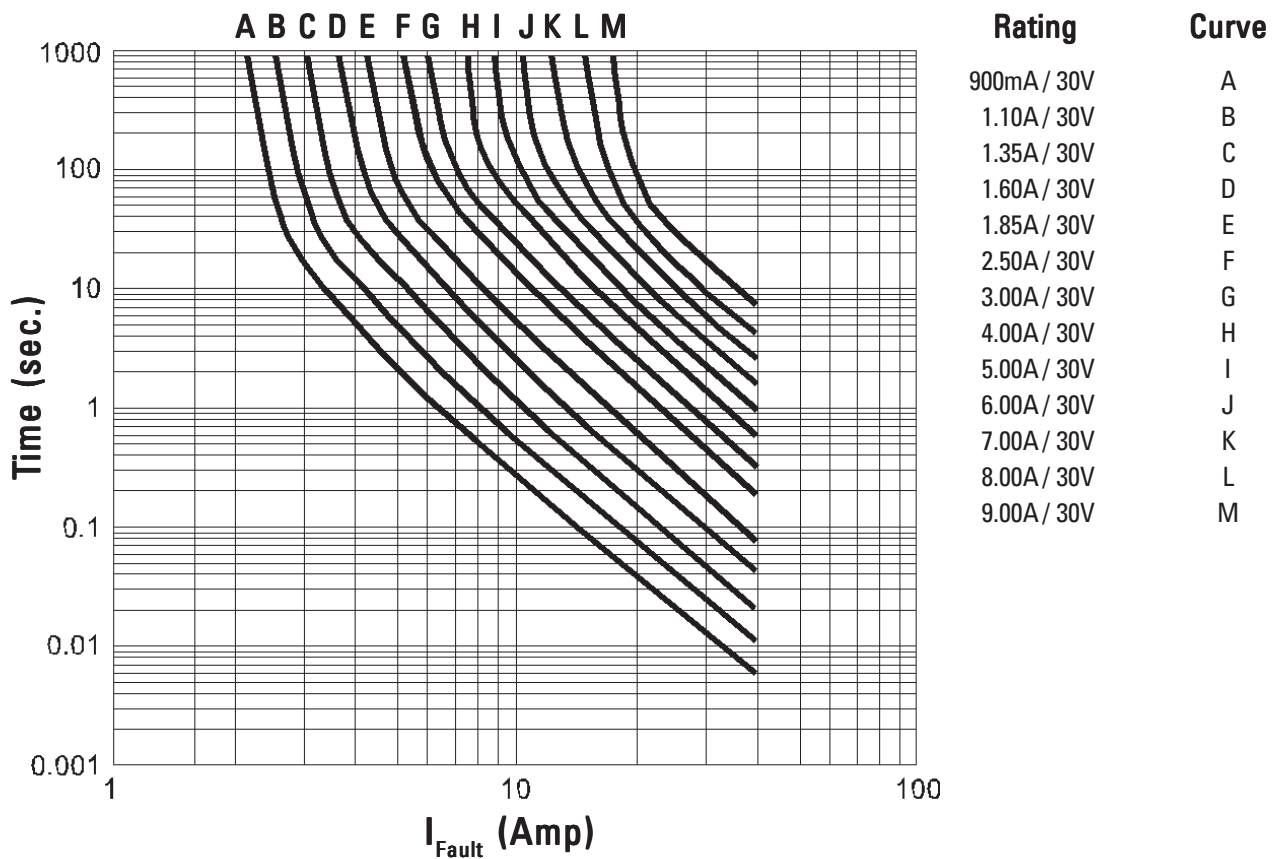
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.



Qty.	Order-Number	Series	Model Code	Pack. Code
		RLD30		

No. RLD30

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
900mA / 30V	1.31	1.17	1.04	0.90	0.75	0.69	0.61	0.55	0.47
1.10A / 30V	1.60	1.43	1.27	1.10	0.91	0.85	0.75	0.67	0.57
1.35A / 30V	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.70
1.60A / 30V	2.32	2.08	1.84	1.60	1.33	1.23	1.09	0.98	0.83
1.85A / 30V	2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
2.50A / 30V	3.63	3.25	2.88	2.50	2.08	1.93	1.70	1.53	1.30
3.00A / 30V	4.35	3.90	3.45	3.00	2.49	2.31	2.04	1.83	1.56
4.00A / 30V	5.80	5.20	4.60	4.00	3.32	3.08	2.72	2.44	2.08
5.00A / 30V	7.25	6.50	5.75	5.00	4.15	3.85	3.40	3.05	2.60
6.00A / 30V	8.70	7.80	6.90	6.00	4.98	4.62	4.08	3.66	3.12
7.00A / 30V	10.15	9.10	8.05	7.00	5.81	5.39	4.76	4.27	3.64
8.00A / 30V	11.60	10.40	9.20	8.00	6.64	6.16	5.44	4.88	4.16
9.00A / 30V	13.05	11.70	10.35	9.00	7.47	6.93	6.12	5.49	4.68