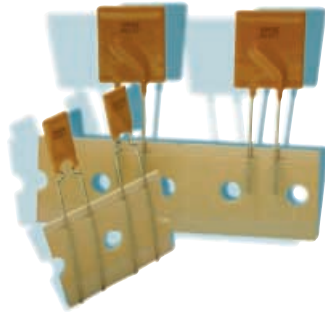
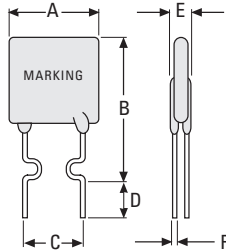


# No. RLD30



### Dimensions (mm)



## Radial Leaded, 30V

### 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](http://www.wickmannusa.com/products/rld30.pdf)

#### Approval Certificates

[www.wickmannusa.com/approvals](http://www.wickmannusa.com/approvals)

#### Packaging

[www.wickmannusa.com/pack](http://www.wickmannusa.com/pack)

## Specifications

### 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)	$R_{1max}$ 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 ( $I_{max}$ ).  
 $I_{max}$  = 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.**

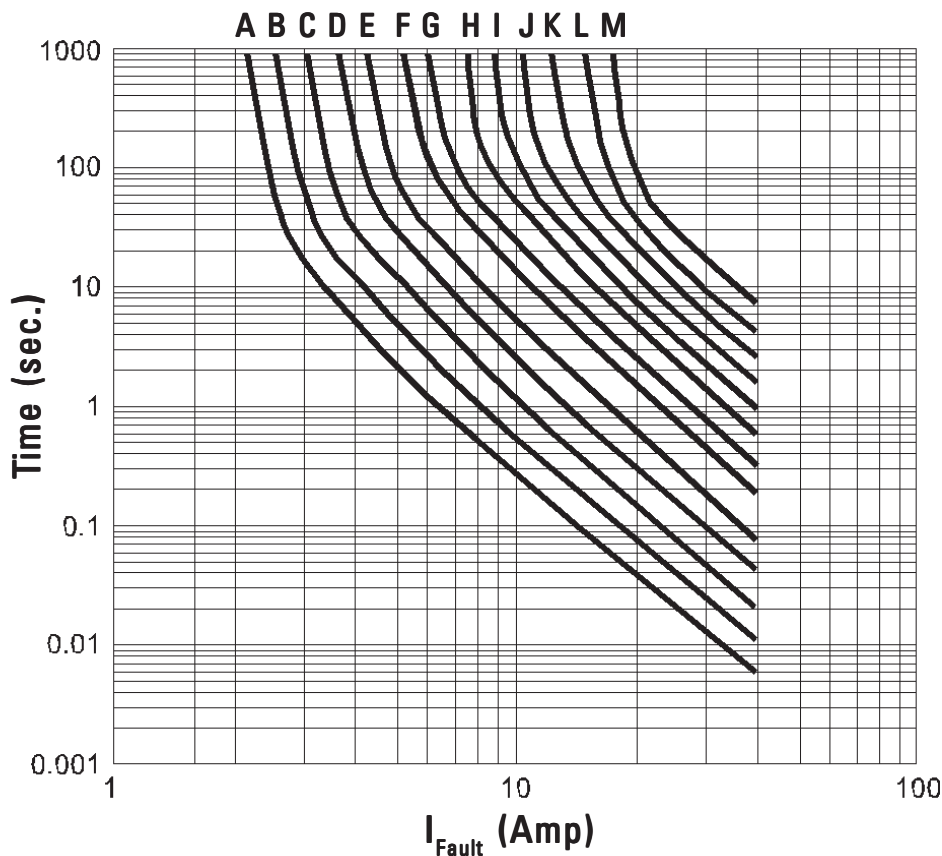
### Order Information

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

Specifications are subject to change without notice.

# No. RLD30

## Time-to-trip Characteristics



Rating	Curve
900mA / 30V	A
1.10A / 30V	B
1.35A / 30V	C
1.60A / 30V	D
1.85A / 30V	E
2.50A / 30V	F
3.00A / 30V	G
4.00A / 30V	H
5.00A / 30V	I
6.00A / 30V	J
7.00A / 30V	K
8.00A / 30V	L
9.00A / 30V	M

## 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