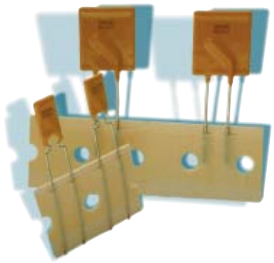
RLD30



Radial Leaded, 30 V

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

Approvals
cULus Recognition
TÜV

Features

This 30 V product line can be used in almost anywhere there is a low voltage power supply (<30 V dc) and a load to be protected including

- General electronics
- Computer and Peripherals
- Automotive Electronics

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

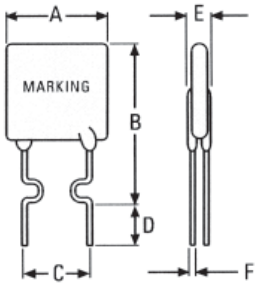
Soldering Characteristics
Solderability per MIL-STD-202, Method 208E

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

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

Marking
"P", voltage, amperage rating, lot number

Dimensions (mm)



Dimensions (mm)

Model	A Max	B Max	C typ	D Min	E Max	Physical Characteristics Lead	Material	packaging quantity bag	ammo
RLD30P090U	7.4	12.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P110U	7.4	14.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P135U	8.9	13.5	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P160U	8.9	15.2	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P185U	10.2	15.7	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P250U	11.4	18.3	5.1	7.6	3.0	0.51 dia.	Sn/CuFe	500	2,000
RLD30P300U	11.4	17.3	5.1	7.6	3.0	0.81 dia.	Sn/Cu	500	2,000
RLD30P400U	14.0	20.1	5.1	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000
RLD30P500U	14.0	24.9	10.2	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000
RLD30P600U	16.5	24.9	10.2	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000
RLD30P700U	19.1	26.7	10.2	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000
RLD30P800U	21.6	29.2	10.2	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000
RLD30P900U	24.1	29.7	10.2	7.6	3.0	0.81 dia.	Sn/Cu	100	1,000

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 (sec. @ A)	$P_{d\ max.}$ (W)	Resistance $R_{min.}$ ( )	$R_{1\ max.}$ ( )	Approvals cURus	TÜV
RLD30P090U	0.90	1.80	30	40	5.90 @ 4.50	0.6	0.070	0.220	•	•
RLD30P110U	1.10	2.20	30	40	6.60 @ 5.50	0.7	0.050	0.170	•	•
RLD30P135U	1.35	2.70	30	40	7.30 @ 6.75	0.8	0.040	0.130	•	•
RLD30P160U	1.60	3.20	30	40	8.00 @ 8.00	0.9	0.030	0.110	•	•
RLD30P185U	1.85	3.70	30	40	8.70 @ 9.25	1.0	0.030	0.090	•	•
RLD30P250U	2.50	5.00	30	40	10.30 @ 12.50	1.2	0.020	0.070	•	•
RLD30P300U	3.00	6.00	30	40	10.80 @ 15.00	2.0	0.020	0.080	•	•
RLD30P400U	4.00	8.00	30	40	12.70 @ 20.00	2.5	0.010	0.050	•	•
RLD30P500U	5.00	10.00	30	40	14.50 @ 25.00	3.0	0.010	0.050	•	•
RLD30P600U	6.00	12.00	30	40	16.00 @ 30.00	3.5	0.005	0.040	•	•
RLD30P700U	7.00	14.00	30	40	17.50 @ 35.00	3.8	0.005	0.030	•	•
RLD30P800U	8.00	16.00	30	40	18.80 @ 40.00	4.0	0.005	0.020	•	•
RLD30P900U	9.00	18.00	30	40	20.00 @ 40.00	4.2	0.005	0.020	•	•

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})

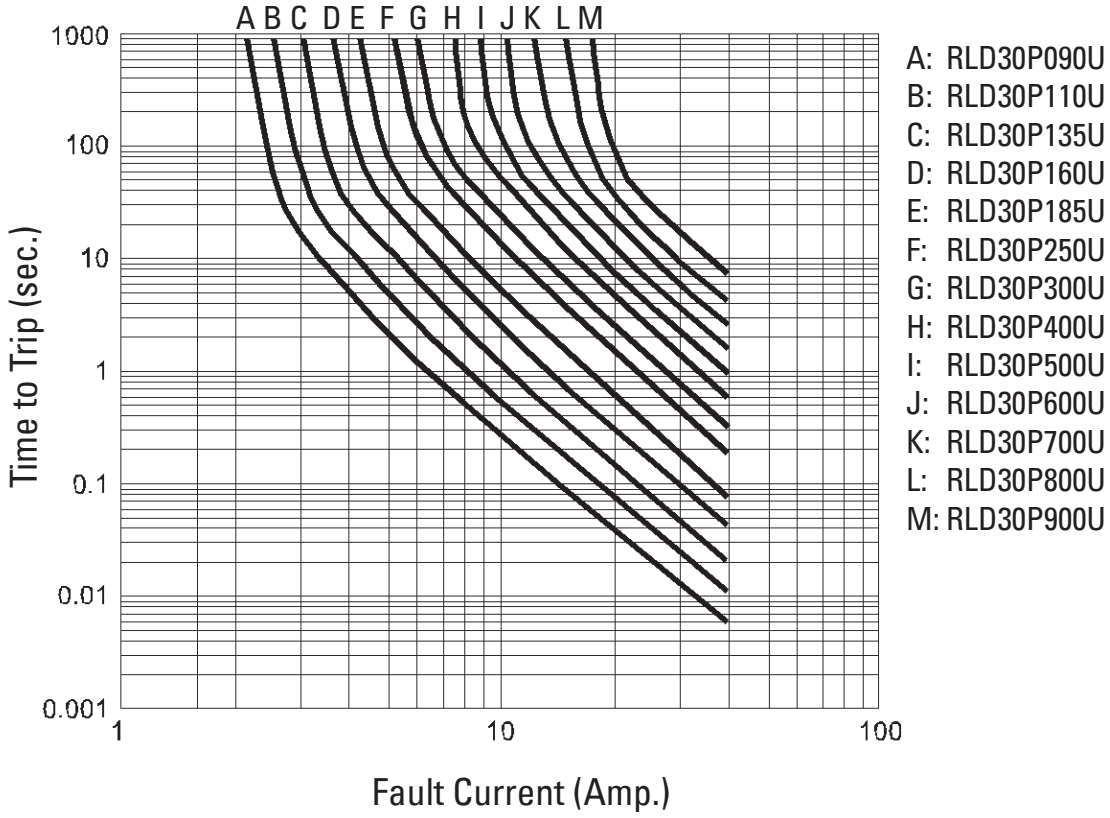
P_d = Power dissipated from device when in the tripped state at 20 °C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{1max} = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.
Caution: Operation beyond the specified rating may result 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

RLD30



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
RLD30P090U	1.31	1.17	1.04	0.90	0.75	0.69	0.61	0.55	0.47
RLD30P110U	1.60	1.43	1.27	1.10	0.91	0.85	0.75	0.67	0.57
RLD30P135U	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.70
RLD30P160U	2.32	2.08	1.84	1.60	1.33	1.23	1.09	0.98	0.83
RLD30P185U	2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
RLD30P250U	3.63	3.25	2.88	2.50	2.08	1.93	1.70	1.53	1.30
RLD30P300U	4.35	3.90	3.45	3.00	2.49	2.31	2.04	1.83	1.56
RLD30P400U	5.80	5.20	4.60	4.00	3.32	3.08	2.72	2.44	2.08
RLD30P500U	7.25	6.50	5.75	5.00	4.15	3.85	3.40	3.05	2.60
RLD30P600U	8.70	7.80	6.90	6.00	4.98	4.62	4.08	3.66	3.12
RLD30P700U	10.15	9.10	8.05	7.00	5.81	5.39	4.76	4.27	3.64
RLD30P800U	11.60	10.40	9.20	8.00	6.64	6.16	5.44	4.88	4.16
RLD30P900U	13.05	11.70	10.35	9.00	7.47	6.93	6.12	5.49	4.68