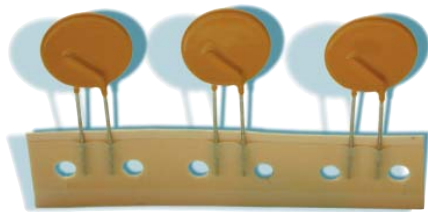


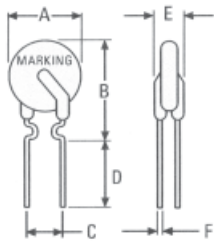
RLD60

Radial Leaded, 60 V

Specifications



Dimensions (mm)



Standard

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

Approvals

cULus Recognition
TÜV

Features

These 60V RLDs were designed to be general-purpose resettable fuses. As such, they are capable of protecting a large variety of circuits, including power supplies, speakers, security and alarm systems, certain motors etc.

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



| Model | Dimensions (mm) | | | | | Physical Characteristics | | packaging quantity | |
|------------|-----------------|-------|-------|-------|-------|--------------------------|----------|--------------------|-------|
| | A Max | B Max | C typ | D Min | E Max | Lead | Material | bag | ammo |
| RLD60P010X | 7.4 | 12.7 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P017X | 7.4 | 12.7 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P020X | 7.4 | 12.2 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P025X | 7.4 | 12.7 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P030X | 7.4 | 13.0 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P040X | 7.6 | 13.5 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/CuFe | 500 | 2,000 |
| RLD60P050X | 7.9 | 13.7 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/Cu | 500 | 2,000 |
| RLD60P065X | 9.7 | 14.5 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/Cu | 500 | 2,000 |
| RLD60P075X | 10.4 | 15.2 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/Cu | 500 | 2,000 |
| RLD60P090X | 11.7 | 15.7 | 5.1 | 7.6 | 3.1 | 0.51 dia. | Sn/Cu | 500 | 2,000 |
| RLD60P110X | 13.0 | 18.0 | 5.1 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 500 | 1,000 |
| RLD60P135X | 14.5 | 19.6 | 5.1 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 1,000 |
| RLD60P160X | 16.3 | 21.3 | 5.1 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 1,000 |
| RLD60P185X | 17.8 | 22.9 | 5.1 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 1,000 |
| RLD60P250X | 21.3 | 26.4 | 10.2 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 1,000 |
| RLD60P300X | 24.9 | 30.0 | 10.2 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 1,000 |
| RLD60P375X | 28.4 | 33.5 | 10.2 | 7.6 | 3.1 | 0.81 dia. | Sn/Cu | 100 | 800 |

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.} (Ω) | R _{1max.} (Ω) | UL | CSA |
| RLD60P010X | 0.10 | 0.20 | 60 | 40 | 4.00 @ 0.50 | 0.38 | 2.500 | 7.500 | • | p |
| RLD60P017X | 0.17 | 0.34 | 60 | 40 | 3.00 @ 0.85 | 0.48 | 3.300 | 8.000 | • | p |
| RLD60P020X | 0.20 | 0.40 | 60 | 40 | 2.20 @ 1.00 | 0.41 | 1.830 | 4.400 | • | • |
| RLD60P025X | 0.25 | 0.50 | 60 | 40 | 2.50 @ 1.25 | 0.45 | 1.250 | 3.000 | • | • |
| RLD60P030X | 0.30 | 0.60 | 60 | 40 | 3.00 @ 1.50 | 0.49 | 0.880 | 2.100 | • | • |
| RLD60P040X | 0.40 | 0.80 | 60 | 40 | 3.80 @ 2.00 | 0.56 | 0.550 | 1.290 | • | • |
| RLD60P050X | 0.50 | 1.00 | 60 | 40 | 4.00 @ 2.50 | 0.77 | 0.500 | 1.170 | • | • |
| RLD60P065X | 0.65 | 1.30 | 60 | 40 | 5.30 @ 3.25 | 0.88 | 0.310 | 0.720 | • | • |
| RLD60P075X | 0.75 | 1.50 | 60 | 40 | 6.30 @ 3.75 | 0.92 | 0.250 | 0.600 | • | • |
| RLD60P090X | 0.90 | 1.80 | 60 | 40 | 7.20 @ 4.50 | 0.99 | 0.200 | 0.470 | • | • |
| RLD60P110X | 1.10 | 2.20 | 60 | 40 | 8.20 @ 5.50 | 1.50 | 0.150 | 0.380 | • | • |
| RLD60P135X | 1.35 | 2.70 | 60 | 40 | 9.60 @ 6.75 | 1.70 | 0.120 | 0.300 | • | • |
| RLD60P160X | 1.60 | 3.20 | 60 | 40 | 11.40 @ 8.00 | 1.90 | 0.090 | 0.220 | • | • |
| RLD60P185X | 1.85 | 3.70 | 60 | 40 | 12.60 @ 9.25 | 2.10 | 0.080 | 0.190 | • | • |
| RLD60P250X | 2.50 | 5.00 | 60 | 40 | 15.60 @ 12.50 | 2.50 | 0.050 | 0.130 | • | • |
| RLD60P300X | 3.00 | 6.00 | 60 | 40 | 19.80 @ 15.00 | 2.80 | 0.040 | 0.100 | • | • |
| RLD60P375X | 3.75 | 7.50 | 60 | 40 | 24.00 @ 18.75 | 3.20 | 0.030 | 0.080 | • | • |

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})

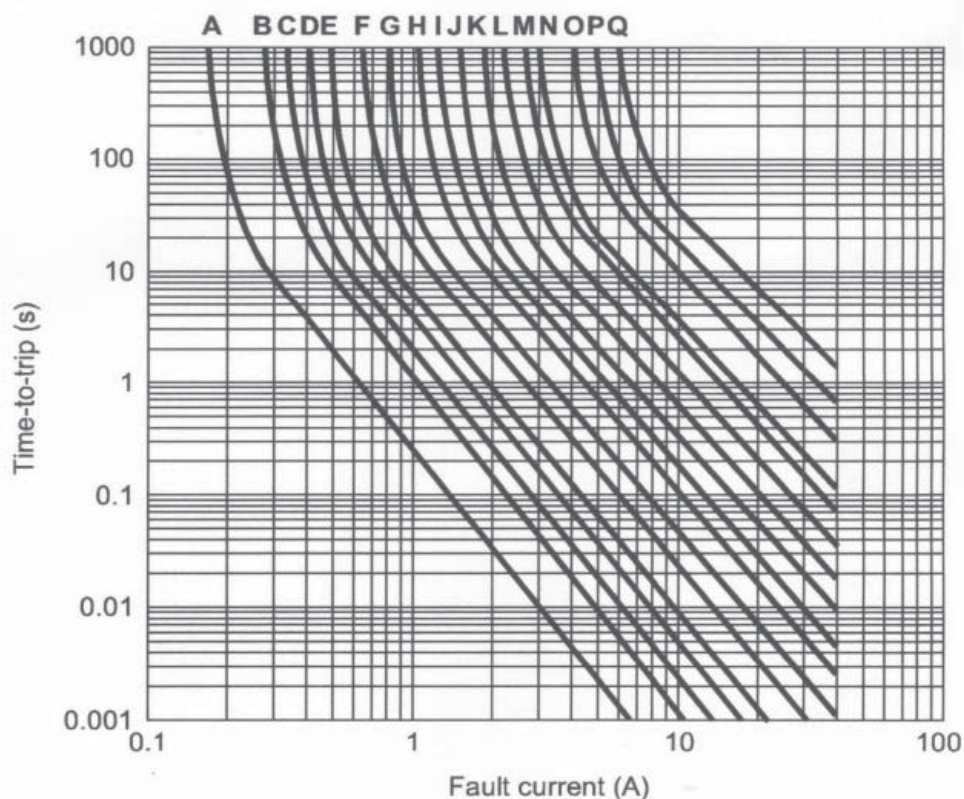
P_d = Power dissipated from device when in the tripped state at 20 °C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{1max} = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.
Caution: Operation beyond the specified rating may result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

RLD60



- A: RLD60P010X
- B: RLD60P017X
- C: RLD60P020X
- D: RLD60P025X
- E: RLD60P030X
- F: RLD60P040X
- G: RLD60P050X
- H: RLD60P065X
- I: RLD60P075X
- J: RLD60P090X
- K: RLD60P110X
- L: RLD60P135X
- M: RLD60P160X
- N: RLD60P185X
- O: RLD60P250X
- P: RLD60P300X
- Q: RLD60P375X

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 |
| RLD60P010X | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.07 | 0.06 | 0.05 | 0.04 |
| RLD60P017X | 0.26 | 0.23 | 0.20 | 0.17 | 0.14 | 0.12 | 0.11 | 0.09 | 0.07 |
| RLD60P020X | 0.31 | 0.27 | 0.24 | 0.20 | 0.16 | 0.14 | 0.13 | 0.11 | 0.08 |
| RLD60P025X | 0.39 | 0.34 | 0.30 | 0.25 | 0.20 | 0.18 | 0.16 | 0.14 | 0.10 |
| RLD60P030X | 0.47 | 0.41 | 0.36 | 0.30 | 0.24 | 0.22 | 0.19 | 0.16 | 0.12 |
| RLD60P040X | 0.62 | 0.54 | 0.48 | 0.40 | 0.32 | 0.29 | 0.25 | 0.22 | 0.16 |
| RLD60P050X | 0.78 | 0.68 | 0.60 | 0.50 | 0.41 | 0.36 | 0.32 | 0.27 | 0.20 |
| RLD60P065X | 1.01 | 0.88 | 0.77 | 0.65 | 0.53 | 0.47 | 0.41 | 0.35 | 0.26 |
| RLD60P075X | 1.16 | 1.02 | 0.89 | 0.75 | 0.61 | 0.54 | 0.47 | 0.41 | 0.30 |
| RLD60P090X | 1.40 | 1.22 | 1.07 | 0.90 | 0.73 | 0.65 | 0.57 | 0.49 | 0.36 |
| RLD60P110X | 1.71 | 1.50 | 1.31 | 1.10 | 0.89 | 0.79 | 0.69 | 0.59 | 0.44 |
| RLD60P135X | 2.09 | 1.84 | 1.61 | 1.35 | 1.09 | 0.97 | 0.85 | 0.73 | 0.54 |
| RLD60P160X | 2.48 | 2.18 | 1.90 | 1.60 | 1.30 | 1.15 | 1.01 | 0.86 | 0.64 |
| RLD60P185X | 2.87 | 2.52 | 2.20 | 1.85 | 1.50 | 1.33 | 1.17 | 1.00 | 0.74 |
| RLD60P250X | 3.88 | 3.40 | 2.98 | 2.50 | 2.03 | 1.80 | 1.58 | 1.35 | 1.00 |
| RLD60P300X | 4.65 | 4.08 | 3.57 | 3.00 | 2.43 | 2.16 | 1.89 | 1.62 | 1.20 |
| RLD60P375X | 5.81 | 5.10 | 4.46 | 3.75 | 3.04 | 2.70 | 2.36 | 2.03 | 1.50 |

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