LRD

Strap Type, 15 V / 20 V

Standard

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

Approvals

cULus Recognition
TÜV

Features

The LRD product series are designed to reduce the device's resistance at the same hold current rating. The smaller thermal mass of these devices also provide benefit of faster trip time and increase the battery safety level. The LRD devices are ideally suited for battery packs used for portble computer and camcorder applications.

Specifications

Packaging

A small pack
D standard

Materials

Insulating material: Polyester Tape
Terminals: Nickel

Max. Device Surface Temperature in Tripped State

125 °C

Operating / Storage Temperature

-40 °C to +85 °C (consider derating)

Humidity Ageing

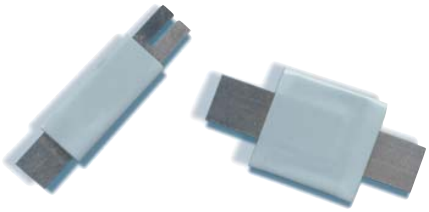
+85 °C, 85 % R.H., 7 days, ± 5 % typical resistance change

Vibration

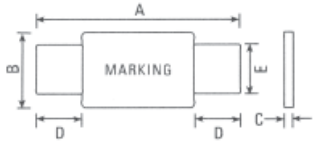
MIL-LRD-883C, Condition A, no change

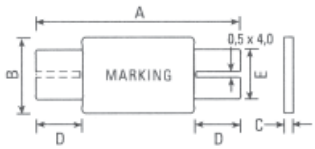
Marking

"P", Part Code, identification, lot number



Dimensions (mm)





S: one slot

cULus TÜV Rheinland

Dimensions (mm)

Model	Fig	A Min	A Max	B Min	B Max	C Min	C Max	D Min	E Min	E Max	packaging quantity small pack	packaging quantity standard
LRD190	1	19.9	22.1	4.9	5.5	0.6	1.0	5.5	3.9	4.1	500	10,000
LRD190S	2	19.9	22.1	4.9	5.5	0.6	1.0	5.5	3.9	4.1	500	10,000
LRD260	1	20.9	23.1	4.9	5.5	0.6	1.0	4.1	3.9	4.1	500	10,000
LRD260S	2	20.9	23.1	4.9	5.5	0.6	1.0	4.1	3.9	4.1	500	10,000
LRD380	1	24.0	26.0	6.9	7.5	0.6	1.0	5.3	4.9	5.1	500	10,000
LRD450	1	24.0	26.0	9.9	10.5	0.6	1.0	5.3	5.9	6.1	500	10,000
LRD550	1	35.0	37.0	6.9	7.5	0.6	1.0	5.3	4.9	5.1	500	10,000
LRD600	1	24.0	26.0	13.9	14.5	0.6	1.0	4.1	5.9	6.1	500	10,000
LRD730	1	27.1	29.1	13.9	14.5	0.6	1.0	4.1	5.9	6.1	500	10,000

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 (s @ A)	$P_{d\,max.}$ (W)	Resistance $R_{min.}$ ( )	Resistance $R_{max.}$ ( )	Resistance $R_{I\,max.}$ ( )	Approvals cULus	Approvals TÜV
LRD190	1.90	3.90	15	100	5.0 @ 9.50	1.20	0.039	0.072	0.102	•	•
LRD190S	1.90	3.90	15	100	5.0 @ 9.50	1.20	0.039	0.072	0.102	•	•
LRD260	2.60	5.80	15	100	5.0 @ 13.00	2.50	0.020	0.042	0.063	•	•
LRD260S	2.60	5.80	15	100	5.0 @ 13.00	2.50	0.020	0.042	0.063	•	•
LRD380	3.80	8.30	15	100	5.0 @ 19.00	2.50	0.013	0.026	0.037	•	•
LRD450	4.50	8.90	20	100	5.0 @ 22.50	2.50	0.011	0.020	0.028	•	•
LRD550	5.50	10.50	20	100	5.0 @ 27.50	2.80	0.009	0.016	0.022	•	•
LRD600	6.00	11.70	20	100	5.0 @ 30.00	2.80	0.007	0.014	0.019	•	•
LRD730	7.30	14.10	20	100	5.0 @ 30.00	3.30	0.006	0.012	0.015	•	•

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

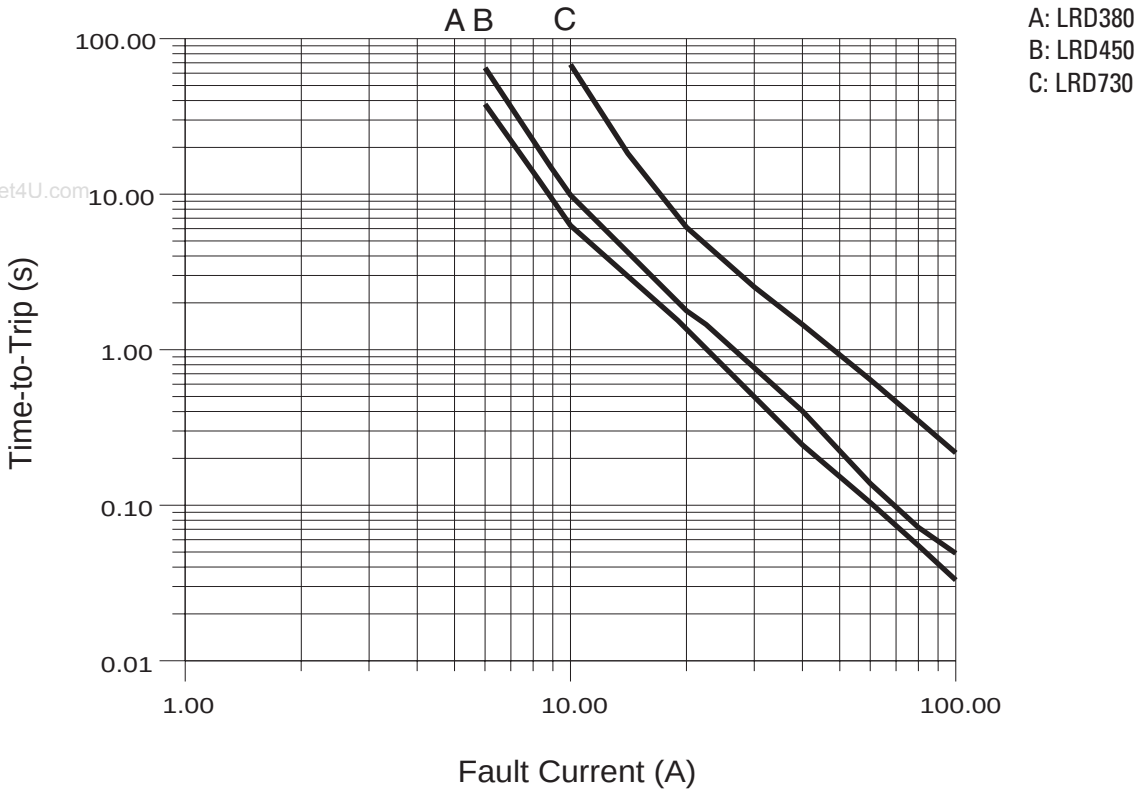
Order Information

Qty.	Order-Number	Model	Packaging

WICKMANN

In our continuing strategy to deliver unparalleled circuit protection solutions, technical expertise and application leadership, we proudly introduce the WICKMANN Group and its products to the Littelfuse portfolio.

LRD



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
LRD190	2.80	2.50	2.30	1.90	1.60	1.50	1.40	1.20	1.00
LRD190S	2.80	2.50	2.30	1.90	1.60	1.50	1.40	1.20	1.00
LRD260	3.80	3.40	3.10	2.60	2.20	2.00	1.90	1.70	1.40
LRD260S	3.80	3.40	3.10	2.60	2.20	2.00	1.90	1.70	1.40
LRD380	5.50	4.90	4.40	3.80	3.30	3.00	2.80	2.50	2.10
LRD450	6.50	5.80	5.30	4.50	3.90	3.60	3.30	2.90	2.50
LRD550	8.00	7.10	6.20	5.50	4.70	4.30	4.00	3.60	3.00
LRD600	8.70	7.80	7.10	6.00	5.20	4.70	4.40	3.90	3.30
LRD730	10.60	9.50	8.60	7.30	6.30	5.70	5.40	4.70	4.00

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