RADIAL LEADED PTC
RLN MODEL

c UL us Pending, TÜV Pending

■ FEATURES

- Axial Leaded, low profile, solid state
- Operation current: 1.40A~4.50A
- Maximum voltage: 6Vdc
- Temperature range: -40℃ to 85℃
- Bulk packing on most models

■ APPLICATIONS

- Rechargeable Battery Packs Protection
- Lithium Cell and Battery packs
- For Low Resistance / High Current Applications

■ PART NUMBERING SYSTEM

ERF XX XXX XX X X X

- Z: RoHS Compliant
- Special number: 0: Standard product
- Packing type: 0: bulk
- Voltage rating: 06:6V
- Current rating: 140: 1.40A
- Model:RLN: Axial leaded devices , Low resistance
- Product Name: Resettable Fuse

■ Electrical characteristics(23℃)

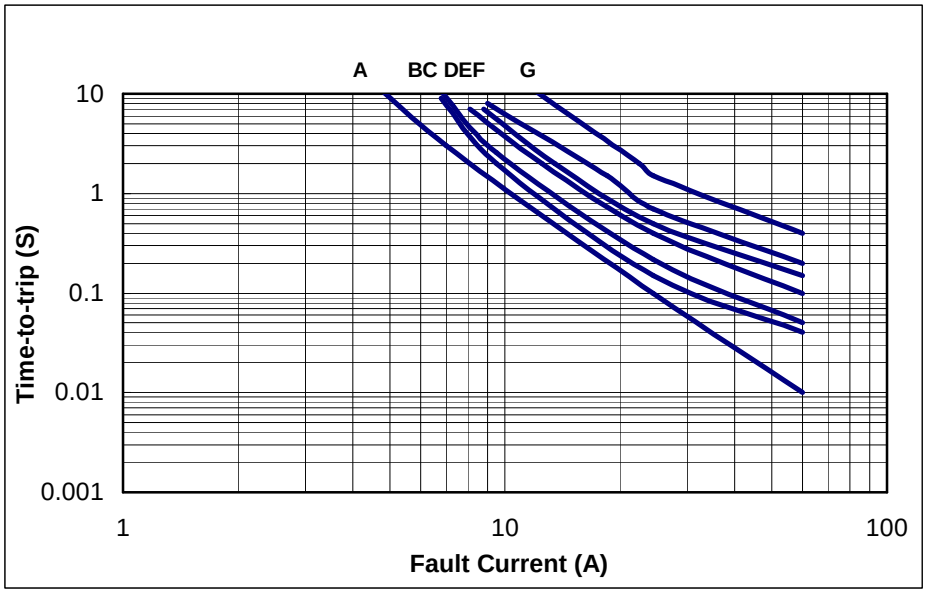
Part Number	Hold Current	Trip Current	Rated Voltage	Maximum Current	Typical Power	Resistance Tolerance		
						R_{MIN}	R_{MAX}	$R1_{MAX}$
	I_H, A	I_T, A	V_{MAX}, Vdc	I_{MAX}, A	Pd, W	Ω	Ω	Ω
RLN140	1.40	3.6	6	50	1.0	0.010	0.020	0.035
RLN180	1.80	5.2	6	50	1.0	0.007	0.014	0.026
RLN190	1.90	4.9	6	50	1.0	0.006	0.014	0.024
RLN250	2.50	8.0	6	50	1.0	0.006	0.012	0.020
RLN270	2.70	8.1	6	50	1.0	0.006	0.012	0.018
RLN310	3.10	8.8	6	50	1.0	0.004	0.010	0.016
RLN370	3.70	9.0	6	50	1.0	0.003	0.008	0.014
RLN450-L	4.50	9.5	6	50	1.0	0.0025	0.0055	0.010

I_T=Trip current-minimum current at which the device will always trip at 23℃ still air.
V_{MAX}=Maximum voltage device can withstand without damage at its rated current.
I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).
Pd=Maximum power dissipated from device when in tripped state in 23℃ still air environment.
R_{MIN}=Minimum device resistance at 23℃.
R_{MAX}=Maximum device resistance at 23℃.
$R1_{MAX}$ =
1) Maximum resistance of device at 23℃ measured 1 hour, after tripping for all product series;
2) or after REFLOW soldering of 260℃ for 20 ~ 40 seconds for all SMD series;
3) or after WAVE soldering of 260℃ for less than 5 seconds for all DIP series.

Special Note :
- In the event that TWO of the above three conditions were experienced once each,the acceptance criteria will become 1.3 times of $R1_{MAX}$.
- In the event that ALL of the above three conditions were experienced once each, the acceptance criteria will become 1.5 times of $R1_{MAX}$.

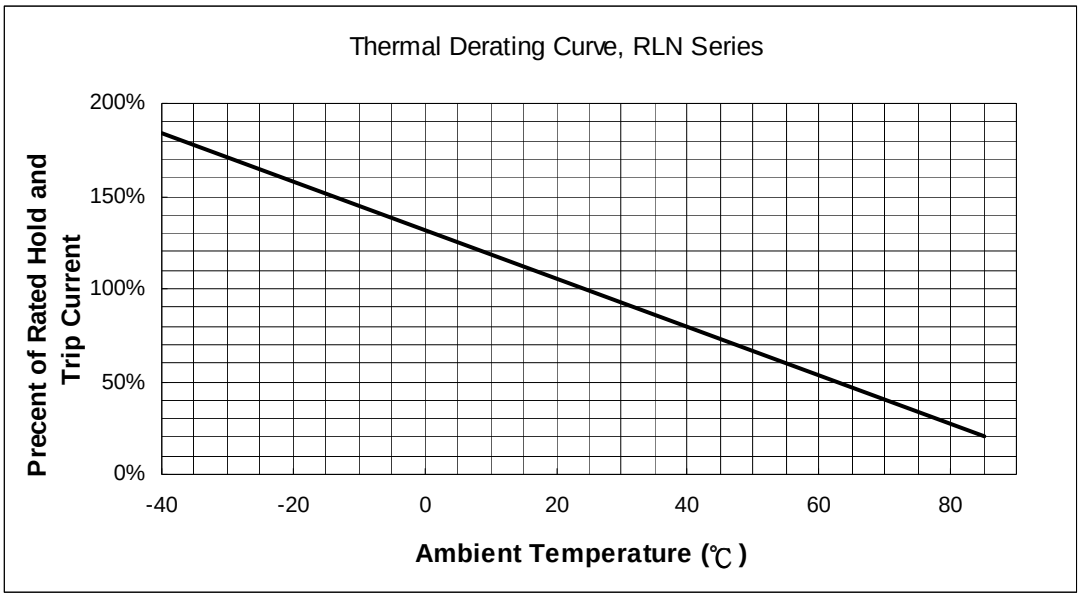
Physical specifications:
Lead material: 0.1 mm nominal thickness, quarter-hard nickel.
Insulating material: Epoxy.

■ Typical Time-To-Trip at 23℃



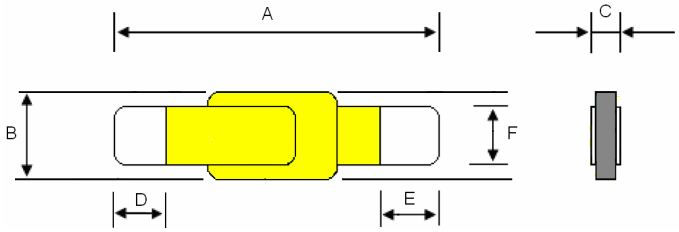
A=RLN140
B=RLN180
C=RLN190
D=RLN250
RLN270
E=RLN310
F=RLN370
G=RLN450-L

■ Thermal Derating Curve



■ RLN Product Dimensions (UNIT: mm)

Part Number	A		B		C		D		E		F	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
RLN140	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN180	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN190	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN250	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN270	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN310	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN370	9.2	10.8	3.15	3.45	0.55	1.10	2.15	3.25	2.15	3.25	2.20	2.40
RLN450-L	20.5	21.5	3.50	3.90	0.55	1.10	7.00	8.00	7.00	8.00	2.40	2.60



■ Standard Package for Reference

P/N	Pcs/Bag	P/N	Pcs/Bag	P/N	Pcs/Bag	P/N	Pcs/Bag
RLN140	500	RLN190	500	RLN270	500	RLN370	500
RLN180	500	RLN250	500	RLN310	500	RLN450-L	500