



RESETTABLE FUSE

RADIAL LEADED PTC RN MODEL

 E175689

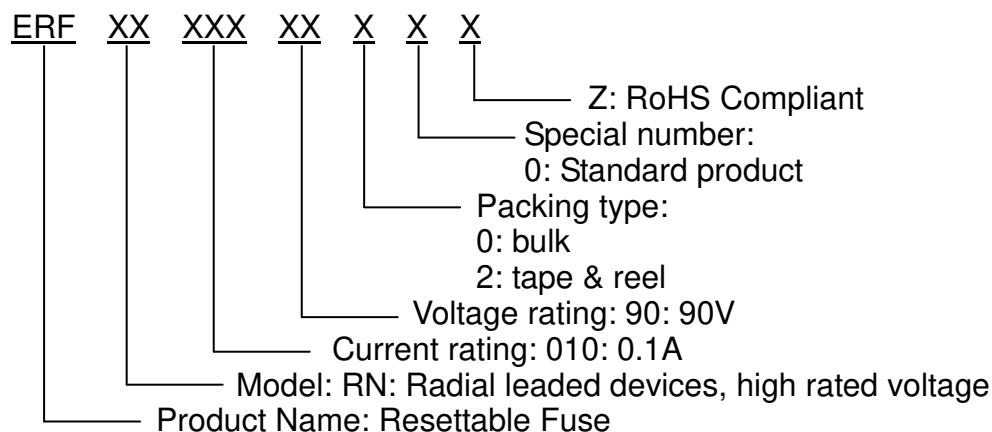
FEATURES

- Radial Leaded, lower hold current, solid state
- Operation current: 100mA~3.75A
- Maximum Voltage: 90V (upgrade from ERFRA 60V)
- Temperature range: -40°C to 85°C
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirement
- Bulk packaging, tape and reel available on most models

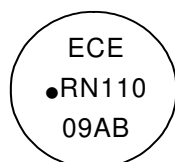
APPLICATIONS

- ◆ Ideal for low voltage power supply with a load to be protected:
- Computers & peripherals
- Security and fire alarm system
- General electronics
- Loud speakers
- Automotive applications
- Power transformers

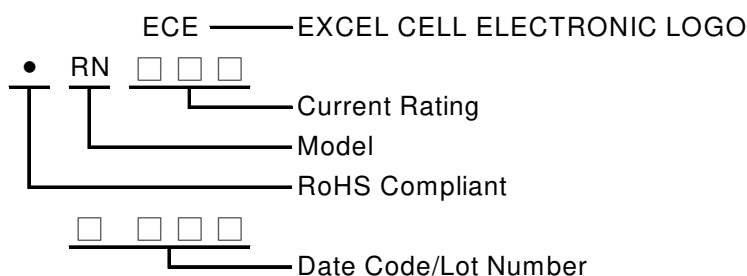
PART NUMBERING SYSTEM



Marking system



Example



*If the current rating is under 1Amp there will be no "ECE" logo shown on the body.



RESETTABLE FUSE

■ Electrical characteristics(23°C)

Part Number	Hold Current	Trip Current	Max. Time to trip	Maximum Current	Rated Voltage	Typical Power	Resistance Tolerance	
							R _{MIN}	R _{1MAX}
	I _H , A	I _T , A	at 5xI _H	I _{MAX} , A	V _{MAX} , V _{dc}	P _d , W	Ω	Ω
RN010-90	0.10	0.20	4.0	40	90	0.38	2.50	7.50
RN015-90	0.15	0.35	10.0	40	90	0.70	2.40	7.00
RN017-90	0.17	0.34	3.0	40	90	0.48	2.00	5.00
RN020-90	0.20	0.40	2.2	40	90	0.41	1.83	4.40
RN025-90	0.25	0.50	2.5	40	90	0.45	1.25	3.00
RN030-90	0.30	0.60	3.0	40	90	0.49	0.88	2.10
RN035-90	0.35	0.75	10.0	40	90	1.30	0.70	2.50
RN040-90	0.40	0.80	3.8	40	90	0.56	0.55	1.29
RN050-90	0.50	1.00	4.0	40	90	0.77	0.50	1.17
RN055-90	0.55	1.20	10.0	40	90	1.50	0.40	1.50
RN065-90	0.65	1.30	5.3	40	90	0.88	0.31	0.72
RN075-90	0.75	1.50	6.3	40	90	0.92	0.25	0.60
RN090-90	0.90	1.80	7.2	40	90	0.99	0.20	0.47
RN110-90	1.10	2.20	8.2	40	90	1.50	0.15	0.38
RN135-90	1.35	2.70	9.6	40	90	1.70	0.12	0.30
RN160-90	1.60	3.20	11.4	40	90	1.90	0.09	0.22
RN185-90	1.85	3.70	12.6	40	90	2.10	0.08	0.19
RN250-90	2.50	5.00	15.6	40	90	2.50	0.05	0.13
RN300-90	3.00	6.00	19.8	40	90	2.80	0.04	0.10
RN375-90	3.75	7.50	24.0	40	90	3.20	0.03	0.08

I_H=Hold current-maximum current at which the device will not trip at 23°C still air.

I_T=Trip current-minimum current at which the device will always trip at 23°C still air.

V_{MAX}=Maximum voltage device can withstand without damage at rated current.

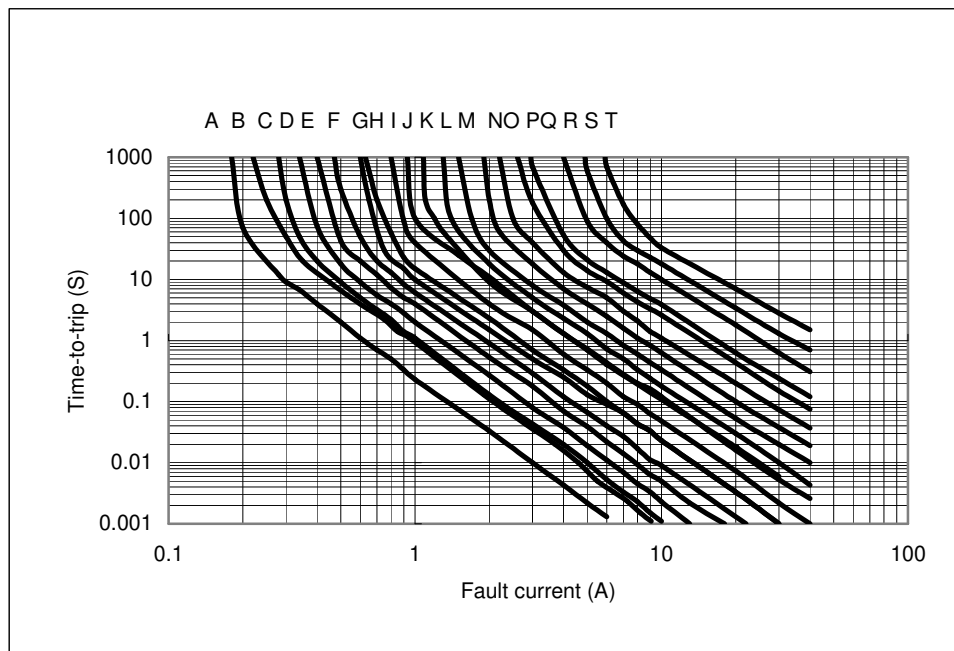
I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V max).

P_d=Typical power dissipated from device when in the tripped state in 23°C still air environment.

R_{MIN}=Minimum device resistance at 23°C.

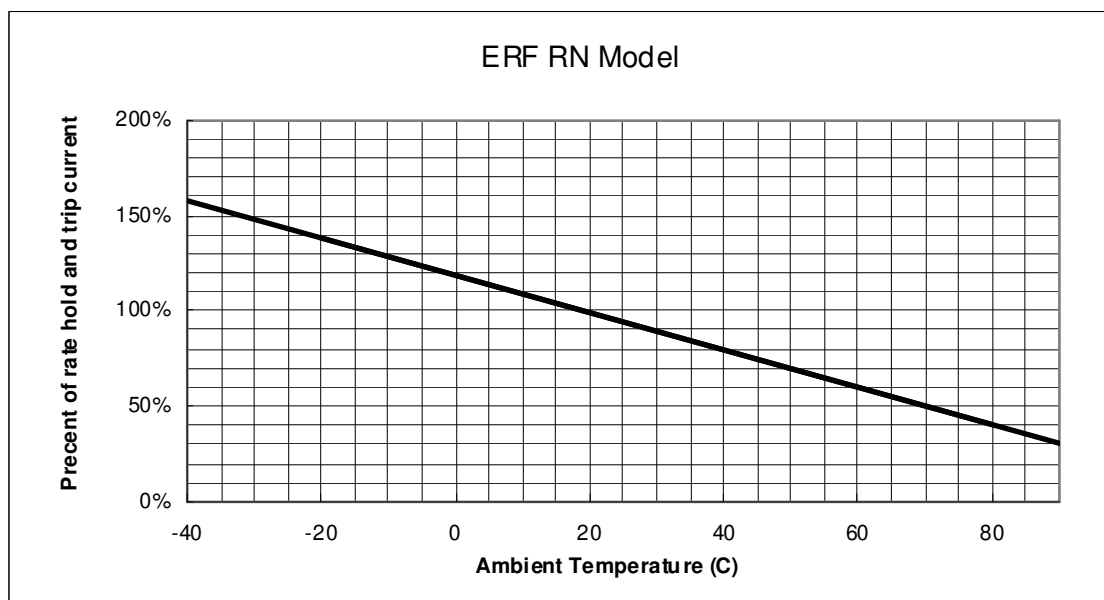
R_{1MAX}=Maximum device resistance at 23°C 1 hour after tripping.

Typical time-to-trip-at 23°C



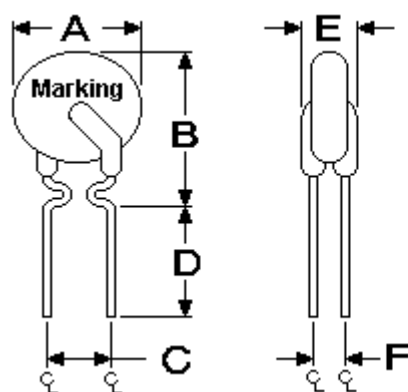
A=RN010-90
 B=RN015-90
 C=RN017-90
 D=RN020-90
 E=RN025-90
 F=RN030-90
 G=RN035-90
 H=RN040-90
 I=RN050-90
 J=RN055-90
 K=RN065-90
 L=RN070-90
 M=RN090-90
 N=RN110-90
 O=RN135-90
 P=RN160-90
 Q=RN185-90
 R=RN250-90
 S=RN300-90
 T=RN375-90

Thermal Derating Curve



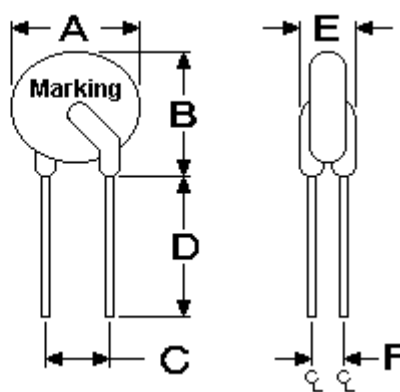
■ RN Product Dimensions (UNIT: mm)

Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
RN010-90	7.4	12.7	5.1	7.6	3.1	1.1
RN015-90	7.4	12.7	5.1	7.6	3.1	1.1
RN017-90	7.4	12.7	5.1	7.6	3.1	1.1
RN020-90	7.4	12.7	5.1	7.6	3.1	1.1
RN025-90	7.4	12.7	5.1	7.6	3.1	1.1
RN030-90	7.4	13.0	5.1	7.6	3.1	1.1
RN035-90	7.4	12.7	5.1	7.6	3.1	1.1
RN040-90	7.6	13.5	5.1	7.6	3.1	1.1
RN050-90	7.9	13.7	5.1	7.6	3.1	1.1
RN055-90	9.7	14.0	5.1	7.6	3.1	1.1
RN065-90	9.7	14.5	5.1	7.6	3.1	1.1
RN075-90	10.4	15.2	5.1	7.6	3.1	1.1
RN090-90	11.7	15.8	5.1	7.6	3.1	1.1
RN110-90	13.0	18.0	5.1	7.6	3.1	1.4
RN135-90	14.5	19.6	5.1	7.6	3.1	1.4
RN160-90	16.3	21.3	5.1	7.6	3.1	1.4
RN185-90	17.8	22.9	5.1	7.6	3.1	1.4
RN250-90	21.3	26.4	10.2	7.6	3.1	1.4
RN300-90	24.9	30.0	10.2	7.6	3.1	1.4
RN375-90	28.5	33.5	10.2	7.6	3.1	1.4



RN 010-90 ~ RN 090-90

- Lead Size: 24AWG
- φ0.51mm Diameter



RN 110-90 ~ RN 375-90

- Lead Size: 20AWG
- φ0.81mm Diameter

■ **Standard Package for Reference**

P/N	Pcs/Bag	Reel/Tape	P/N	Pcs/Bag	Reel/Tape
RN010-90	500	3.0K	RN065-90	300	3.0K
RN015-90	500	3.0K	RN075-90	300	3.0K
RN017-90	500	3.0K	RN090-90	300	3.0K
RN020-90	500	3.0K	RN110-90	300	1.5K
RN025-90	500	3.0K	RN135-90	200	1.5K
RN030-90	500	3.0K	RN160-90	200	1.5K
RN035-90	500	3.0K	RN185-90	200	1.5K
RN040-90	500	3.0K	RN250-90	100	1.0K
RN050-90	500	3.0K	RN300-90	100	1.0K
RN055-90	500	3.0K	RN375-90	100	1.0K