

Summary

- RoHS Compliant (Lead Free) Product
- Applications : Wide variety of electronic equipment
- Product Features : Low hold current, Solid state, Radial leaded product ideal for upto 60V DC
- Operation Current : 0.05A~3.75A
- Maximum Voltage : 60V DC
- Temperature Range : -40 ̊ to 85

Agency Recognition

UL : File No. E211981
 C-UL: File No. E211981
 TÜV: File No. R50004084

Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Maximum Current	Rated Voltage	Typical Power	Resistance	
							R _{MIN}	R _{1MAX}
	I _H ,A	I _T ,A	at 5xI _H ,S	I _{MAX} ,A	V _{MAX} ,VDC	P _d , W	Ohms	Ohms
TRX005-60F	0.05	0.10	5.0	40	60	0.26	7.30	20.00
TRX010-60F	0.10	0.20	4.0	40	60	0.38	2.50	7.50
TRX017-60F	0.17	0.34	3.0	40	60	0.48	2.00	8.00
TRX020-60F	0.20	0.40	2.2	40	60	0.41	1.83	4.40
TRX025-60F	0.25	0.50	2.5	40	60	0.45	1.25	3.00
TRX030-60F	0.30	0.60	3.0	40	60	0.49	0.88	2.10
TRX040-60F	0.40	0.80	3.8	40	60	0.56	0.55	1.29
TRX050-60F	0.50	1.00	4.0	40	60	0.77	0.50	1.17
TRX065-60F	0.65	1.30	5.3	40	60	0.88	0.31	0.72
TRX075-60F	0.75	1.50	6.3	40	60	0.92	0.25	0.60
TRX090-60F	0.90	1.80	7.2	40	60	0.99	0.20	0.47
TRX110-60F	1.10	2.20	8.2	40	60	1.50	0.15	0.38
TRX135-60F	1.35	2.70	9.6	40	60	1.70	0.12	0.30
TRX160-60F	1.60	3.20	11.4	40	60	1.90	0.09	0.22
TRX185-60F	1.85	3.70	12.6	40	60	2.10	0.08	0.19
TRX250-60F	2.50	5.00	15.6	40	60	2.50	0.05	0.13
TRX300-60F	3.00	6.00	19.8	40	60	2.80	0.04	0.10
TRX375-60F	3.75	7.50	24.0	40	60	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 its 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 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.

Physical specifications:

Lead material: FRX005-60F~FRX090-60F Tin plated copper, 24 AWG.

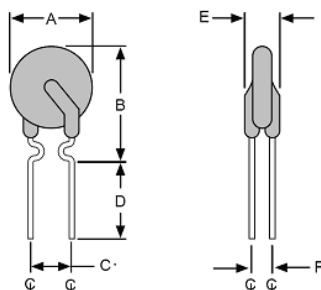
FRX110-60F~FRX375-60F Tin plated copper, 20 AWG.

Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

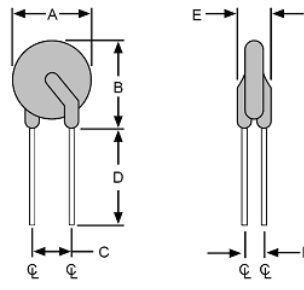
NOTE : Specification subject to change without notice.

Production Dimensions (millimeter)



FRX 005-60F ~ FRX 090-60F

Lead Size : 24AWG
 Φ 0.51 mm Diameter

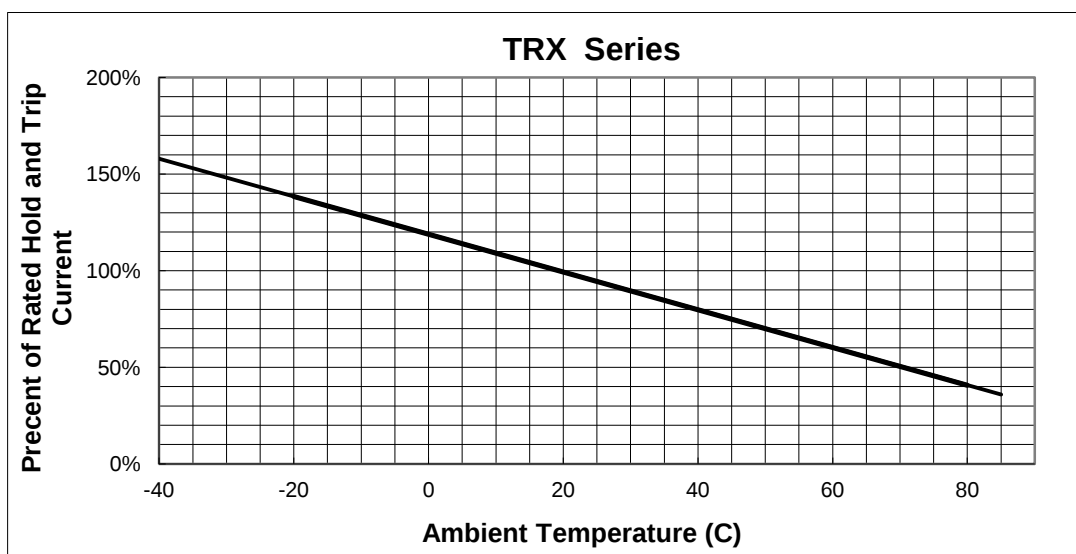


FRX 110-60F ~ FRX 375-60F

Lead Size : 20AWG
 Φ 0.81 mm Diameter

Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
TRX005-60F	7.4	12.7	5.1	7.6	3.1	1.1
TRX010-60F	7.4	12.7	5.1	7.6	3.1	1.1
TRX017-60F	7.4	12.7	5.1	7.6	3.1	1.1
TRX020-60F	7.4	12.7	5.1	7.6	3.1	1.1
TRX025-60F	7.4	12.7	5.1	7.6	3.1	1.1
TRX030-60F	7.4	13.0	5.1	7.6	3.1	1.1
TRX040-60F	7.6	13.5	5.1	7.6	3.1	1.1
TRX050-60F	7.9	13.7	5.1	7.6	3.1	1.1
TRX065-60F	9.7	14.5	5.1	7.6	3.1	1.1
TRX075-60F	10.4	15.2	5.1	7.6	3.1	1.1
TRX090-60F	11.7	15.8	5.1	7.6	3.1	1.1
TRX110-60F	13.0	18.0	5.1	7.6	3.1	1.4
TRX135-60F	14.5	19.6	5.1	7.6	3.1	1.4
TRX160-60F	16.3	21.3	5.1	7.6	3.1	1.4
TRX185-60F	17.8	22.9	5.1	7.6	3.1	1.4
TRX250-60F	21.3	26.4	10.2	7.6	3.1	1.4
TRX300-60F	24.9	30.0	10.2	7.6	3.1	1.4
TRX375-60F	28.5	33.5	10.2	7.6	3.1	1.4

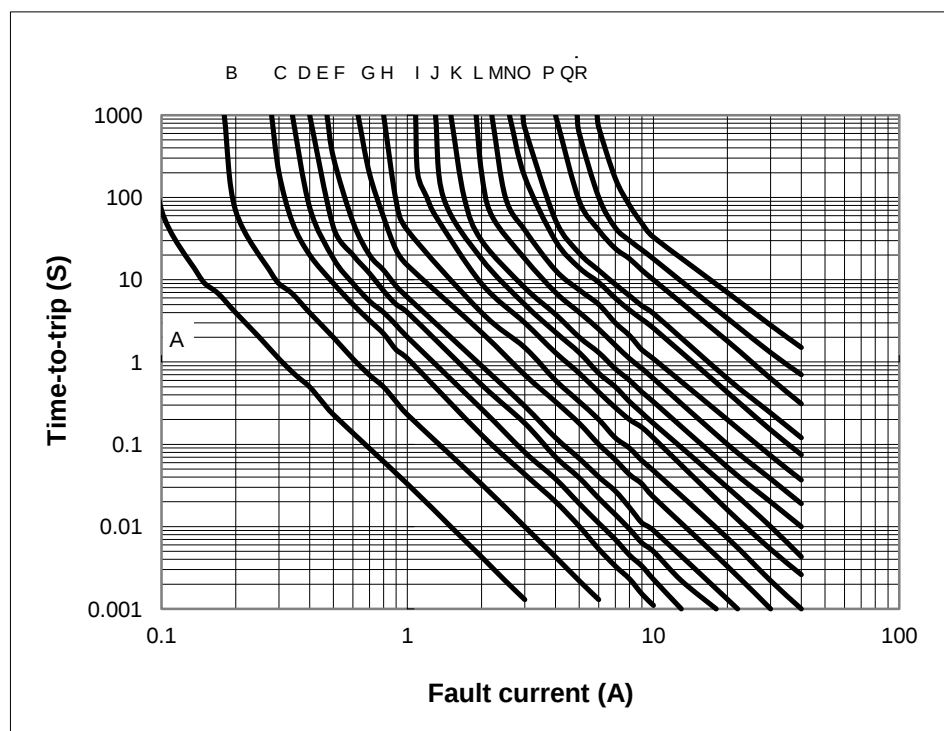
Thermal Derating Curve



NOTE : Specification subject to change without notice.

Typical Time -To-Trip at 23°C

A = TRX005-60F
 B = TRX010-60F
 C = TRX017-60F
 D = TRX020-60F
 E = TRX025-60F
 F = TRX030-60F
 G = TRX040-60F
 H = TRX050-60F
 I = TRX065-60F
 J = TRX075-60F
 K = TRX090-60F
 L = TRX110-60F
 M = TRX135-60F
 N = TRX160-60F
 O = TRX185-60F
 P = TRX250-60F
 Q = TRX300-60F
 R = TRX375-60F



Material Specification

Lead material : FRX005-60F~FRX090-60F Tin plated copper,24 AWG.

FRX110-60F~FRX375-60F Tin plated copper, 20 AWG.

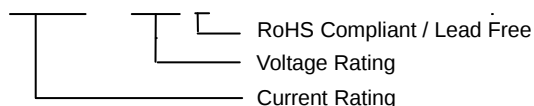
Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement

Part Numbering and Marking System

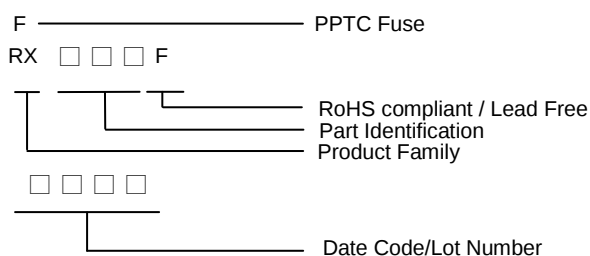
Part Numbering System

TRX □ □ □ — □ □ F



Example

Part Marking System



Note: Font on Marking may look slightly different due to fine turnings of each Marking printer.

Warning: -Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.



- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.

NOTE : Specification subject to change without notice.