



Radial Leaded PTC Resettable Fuse : FRX 160-90F

1. Summary

- (a) **RoHS Compliant (Lead Free) Product**
- (b) **Applications : Telecom and wide variety of electronic equipment.**
- (c) **Product Features : Low hold current, Solid state, Radial leaded product ideal for up to 90V**
- (d) **Operation Current : 1.6A**
- (e) **Maximum Voltage : Up to 90V**
- (f) **Temperature Range : -40°C to 85°C**

2. Agency Recognition

UL : E211981
 C-UL: E211981
 TÜV: R 50004084

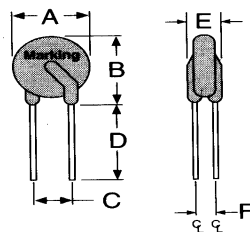
3. Electrical Characteristics (23°C)

Part Number	Hold Current I_H, A	Trip Current I_T, A	Max. Time to Trip at $5 \times I_H$	Maximum Current I_{MAX}, A	Rated Voltage V_{MAX}, V_{dc}	Typical Power P_d, W	Resistance	
							R_{MIN} ohms	R_{1MAX} ohms
FRX160-90F	1.60	3.20	11.4	40	72/90	1.90	0.09	0.22

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: Tin plated copper, 20 AWG.
 Soldering characteristics:MIL-STD-202, Method 208E.
 Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)

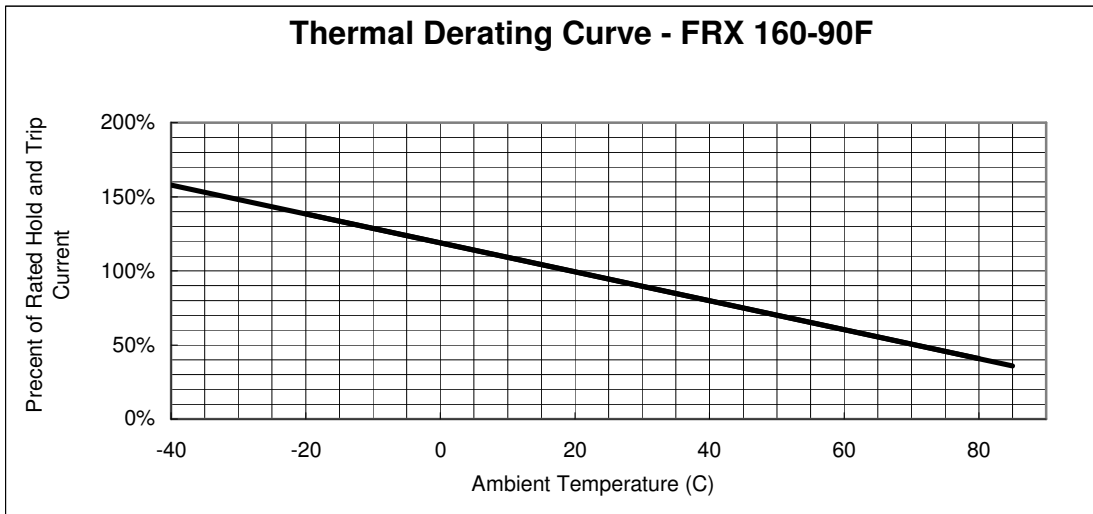


FRX 160-90F
 Lead Size : 20AWG
 Φ 0.81 mm Diameter

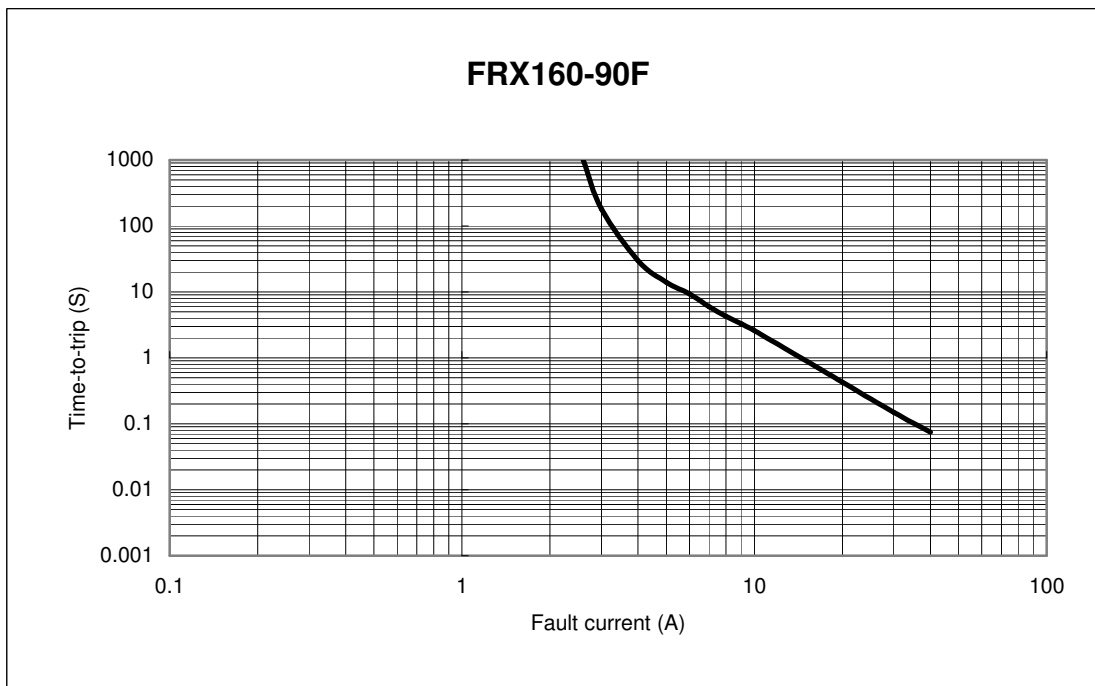
Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRX160-90F	16.3	21.3	5.1	7.6	3.1	1.4



5. Thermal Derating Curve



6. Typical Time-To-Trip at 23°C



 FUZETEC TECHNOLOGY CO., LTD.	NO.	PQ16-117E		
	Product Specification and Approval Sheet	Version	3	Page

7. Material Specification

Lead material : Tin plated copper, 20 AWG.

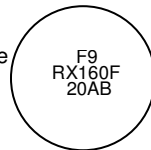
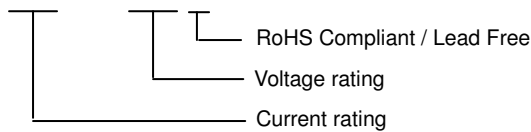
Soldering characteristics:MIL-STD-202, Method 208E.

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

8. Part Numbering and Marking System

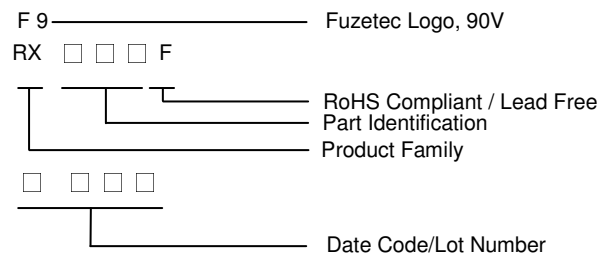
Part Numbering System

F R X □ □ □ - □ □ F



Example

Part Marking System



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.