Radial Leaded PTC Resettable Fuse: FRX 010-60F

1. Summary

(a) **RoHS Compliant (Lead Free) Product**
(b) **Applications: Wide variety of electronic equipment**
(c) **Product Features: Low hold current, Solid state, Radial leaded product ideal for up to 60V**
(d) **Operation Current: 100mA**
(e) **Maximum Voltage: 60V**
(f) **Temperature Range : -40℃ to 85℃**

2. Agency Recognition

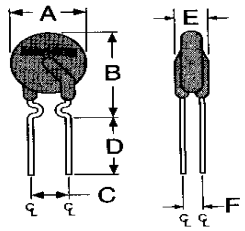
UL: File No. E211981
C-UL: File No. E211981
TÜV: File No. R 50004084

3. Electrical Characteristics (23℃)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Maximum Current	Rated Voltage	Typical Power	Resistance	
							R_{MIN}	$R1_{MAX}$
	I_H, A	I_T, A	at 5xI_H	I_{MAX}, A	V_{MAX}, Vdc	Pd, W	ohms	ohms
FRX010-60F	0.10	0.20	4.0	40	60	0.38	2.50	7.50

I_H=Hold current-maximum current at which the device will not trip at 23℃ still air.
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=Typical power dissipated from device when in tripped state in 23℃ still air environment.
R_{MIN}=Minimum device resistance at 23℃.
$R1_{MAX}$=Maximum device resistance at 23℃, 1 hour after tripping .
Physical specifications:
Lead material: Tin plated copper, 24 AWG.
Soldering characteristics: MIL-STD-202, Method 208E.
Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)

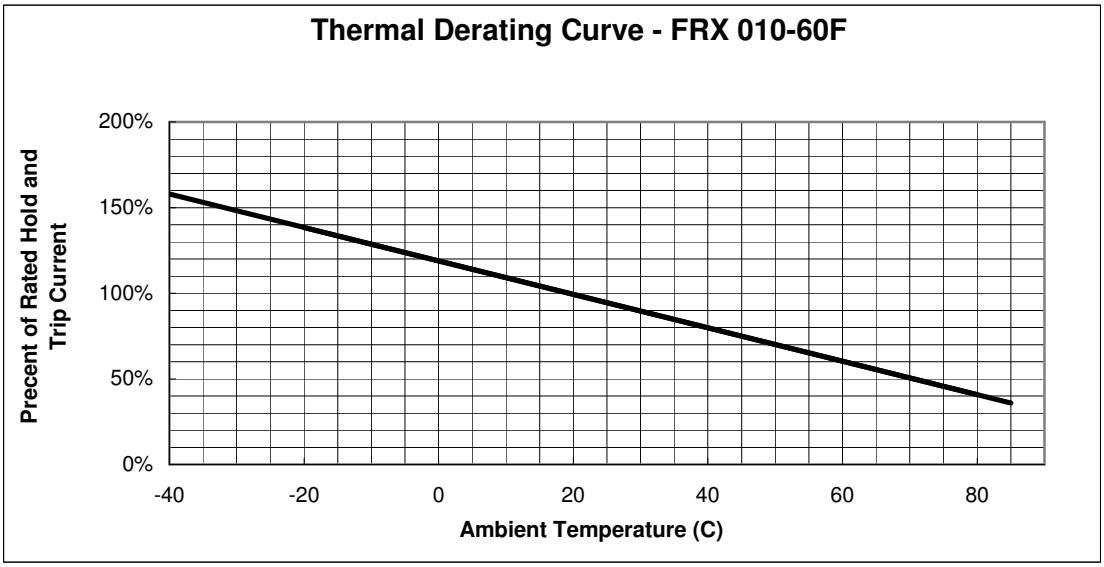


FRX 010-60F
Lead Size: 24AWG
Φ 0.51 mm Diameter

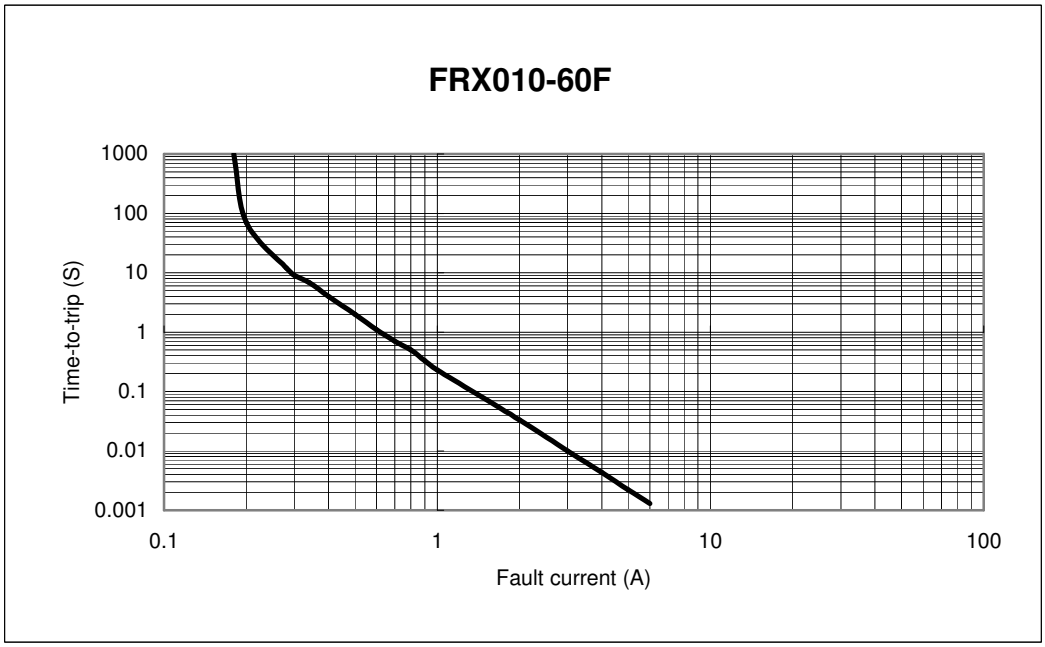
Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRX010-60F	7.4	12.7	5.1	7.6	3.1	1.1

NOTE : Specification subject to change without notice.

5. Thermal Derating Curve



6. Typical Time-To-Trip at 23℃



NOTE : Specification subject to change without notice.

7. Material Specification

Lead material： Tin plated copper, 24 AWG.

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

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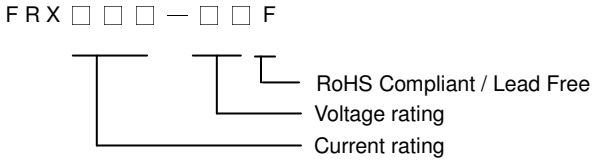
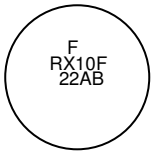
8. Part Numbering and Marking System

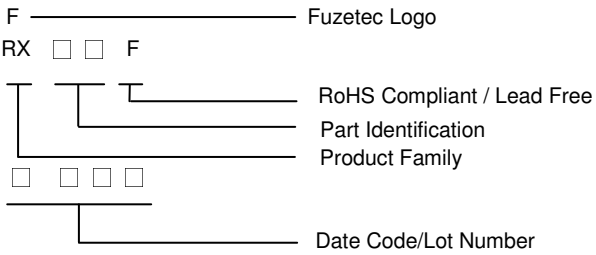
Part Numbering System





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.