



Radial Leaded PTC Resettable Fuse: FRU090-30F

1. Summary

- (a) **RoHS Compliant (Lead Free) Product**
- (b) **Applications: Wide variety of electronic equipment**
- (c) **Product Features: Low resistance, High hold current, Solid state, Radial leaded product ideal for up to 30V**
- (d) **Operation Current: 0.90A**
- (e) **Maximum Voltage: 30V**
- (f) **Temperature Range : -40°C to 85°C**

2. Agency Recognition

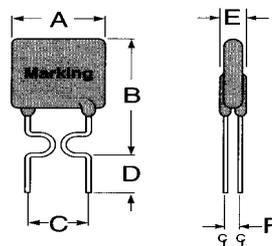
UL: File No. E211981
 C-UL: File No. E211981
 TÜV : File No. R 50004084

3. Electrical Characteristics (23°C)

Part Number	Hold Current I_H , A	Trip Current I_T , A	Max.Time To Trip at 5x I_H	Maximum Current I_{MAX} , A	Rated Voltage V_{MAX} , Vdc	Typical Power P_d , W	Resistance	
							R_{MIN} ohms	R_{1MAX} ohms
FRU090-30F	0.90	1.80	5.9	40	30	0.6	0.070	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 =Maximum 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, 24 AWG.
 Soldering characteristics: MIL-STD-202, Method 208E.
 Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)



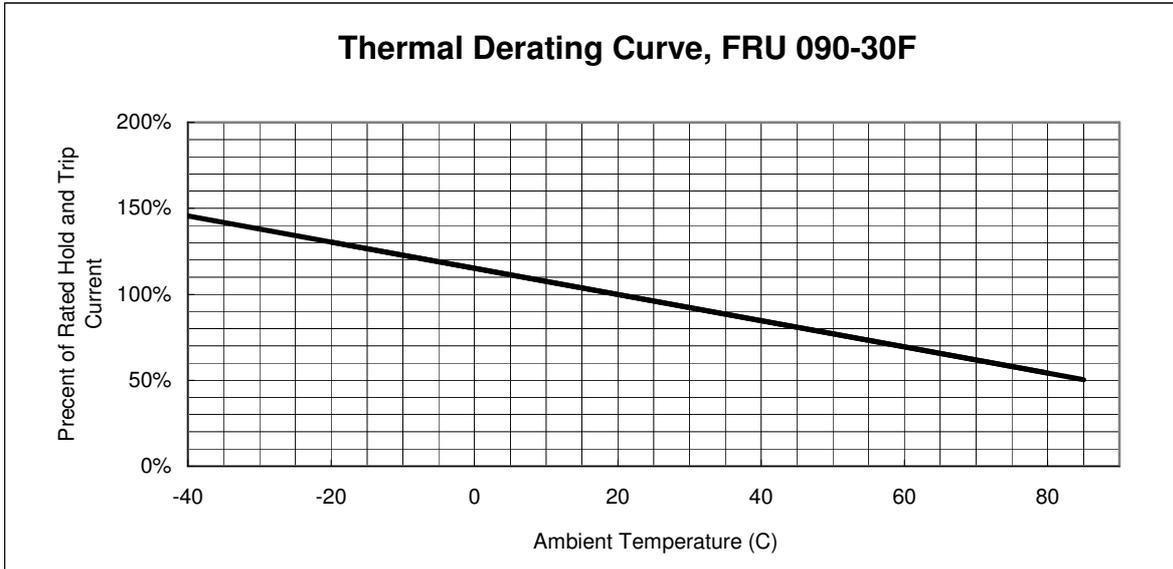
FRU 090-30F
 Lead Size: 24AWG
 Φ 0.51 mm Diameter

Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRU090-30F	7.4	12.2	5.1	7.6	3.0	0.9

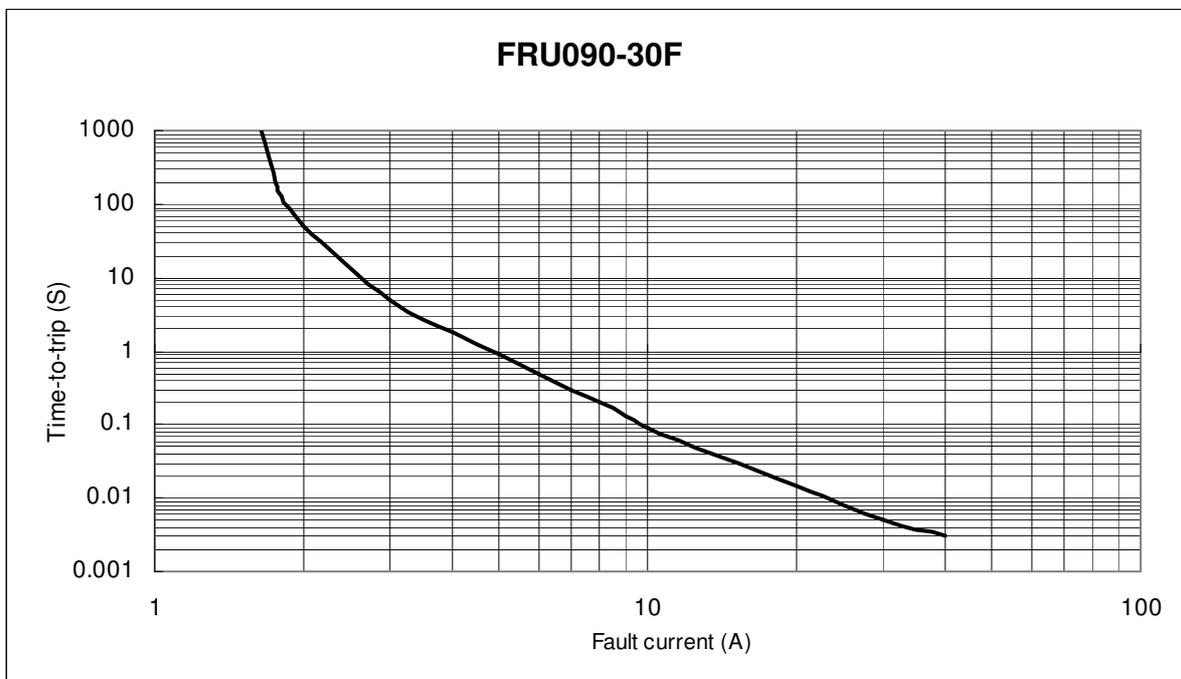
NOTE : Specification subject to change without notice.



5. Thermal Derating Curve



6. Typical Time-To-Trip at 23°C



NOTE : Specification subject to change without notice.



7. Material Specification

Lead material: Tin plated copper, 24 AWG.

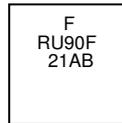
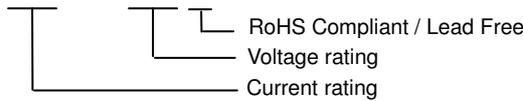
Soldering characteristics: MIL-STD-202, Method 208E.

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

8. Part Numbering and Marking System

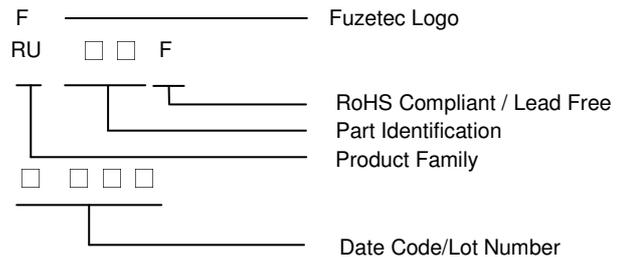
Part Numbering System

F R U □ □ □ - □ □ 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.