

## 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 : 2.5A**
- (e) **Maximum Voltage : Up to 90V**
- (f) **Temperature Range : -40°C to 85°C**

## 2. Agency Recognition

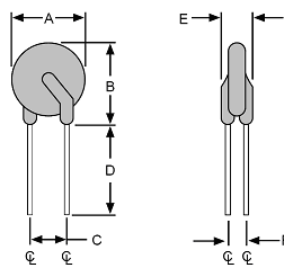
UL : File No. E211981  
 C-UL: File No. E211981  
 TÜV: File No. R50004084

## 3. Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Max. Current	Rated Voltage	Typ. Power	Resistance	
	I <sub>H</sub> ,A	I <sub>T</sub> ,A	at 5xI <sub>H</sub> ,s	I <sub>MAX</sub> ,A	V <sub>MAX</sub> ,VDC	P <sub>d</sub> , W	R <sub>MIN</sub> Ohms	R <sub>1MAX</sub> Ohms
HL90-250	2.50	5.00	15.6	40	72/90	2.50	0.05	0.13

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.  
 I<sub>T</sub>=Trip current-minimum current at which the device will always trip at 23°C still air.  
 V<sub>MAX</sub>=Maximum voltage device can withstand without damage at its rated current.  
 I<sub>MAX</sub>= Maximum fault current device can withstand without damage at rated voltage (V<sub>MAX</sub>).  
 P<sub>d</sub>=Typical power dissipated from device when in tripped state in 23°C still air environment.  
 R<sub>MIN</sub>=Minimum device resistance at 23°C.  
 R<sub>1MAX</sub>=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.

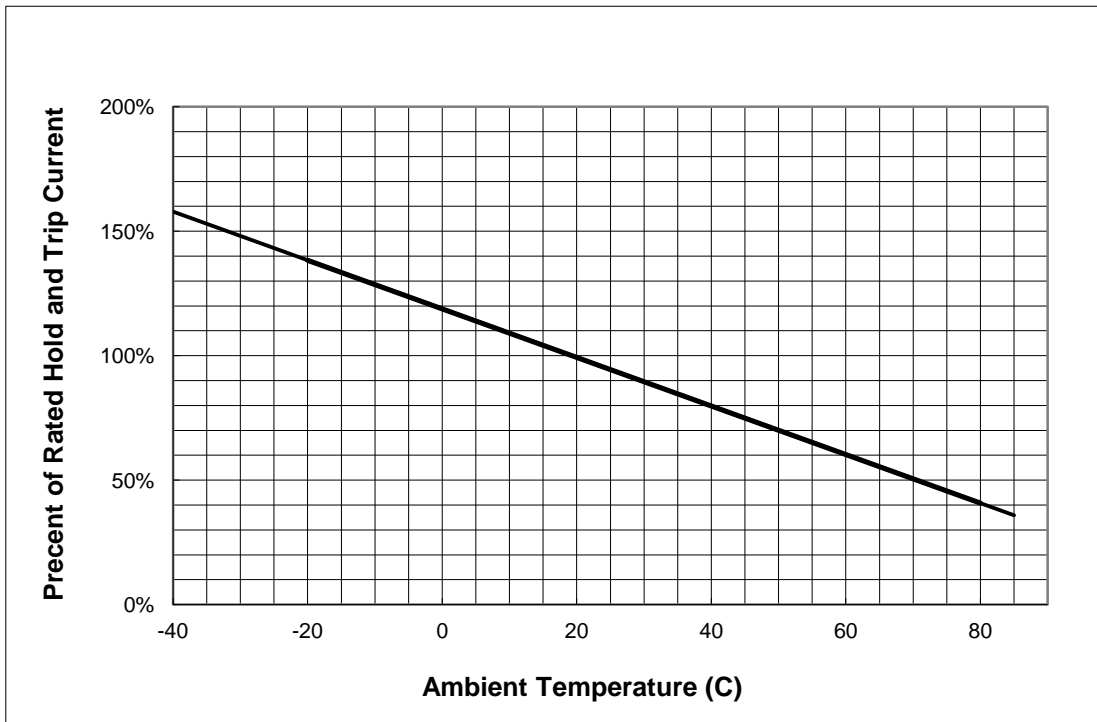
## 4. Production Dimensions (millimeter)



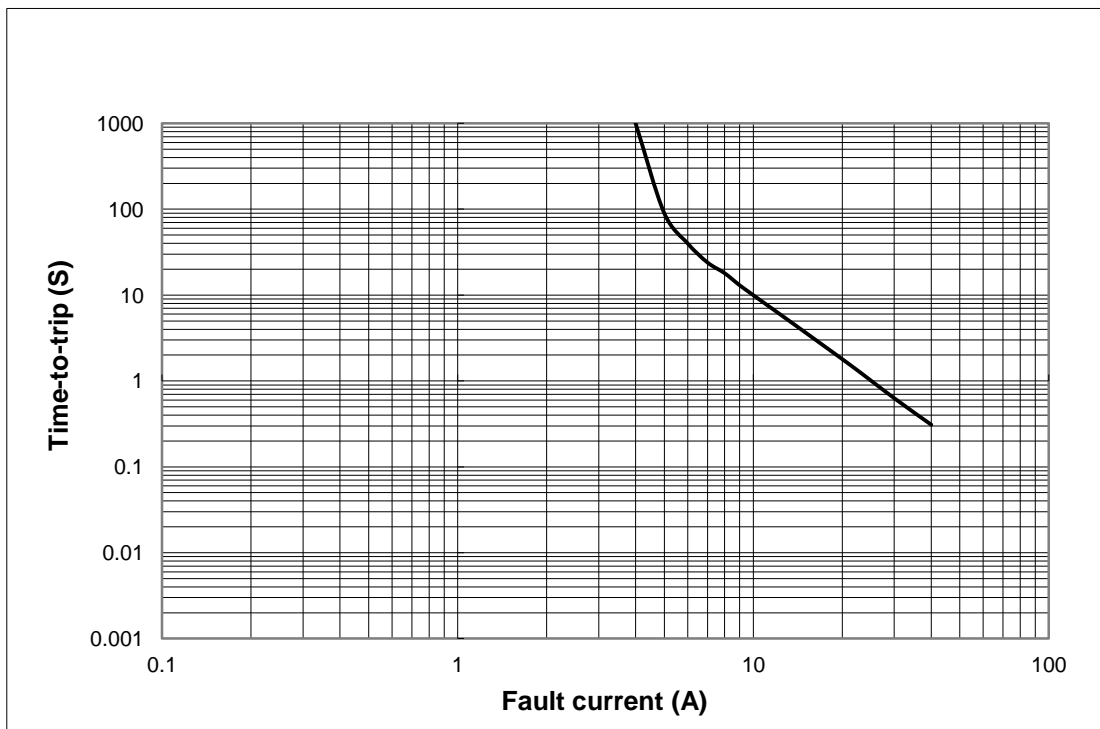
**FRX250-90F**  
 Lead Size : 20AWG  
 Φ 0.81 mm Diameter

Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
HL90-250	21.3	26.4	10.2	7.6	3.1	1.4

### 5. Thermal Derating Curve



### 6. Typical Time-To-Trip at 23°C



## 7. Material Specification

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

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