

Radial Leaded PTC Resettable Fuse: FRV040-240F

1. Summary

- (a) **RoHS Compliant (Lead Free) Product**
- (b) **Applications: Line Voltage Power Supply, Transformer and Appliances**
- (c) **Product Features: Low hold current, Solid state, Radial leaded product ideal for up to 265V_{AC/DC}**
- (d) **Operation Current: 400mA**
- (e) **Maximum Operating Voltage: 240V_{AC/DC}**
- (f) **Maximum Interrupt Voltage: 265V_{AC/DC}**
- (g) **Temperature Range : -40°C to 85°C**

2. Agency Recognition

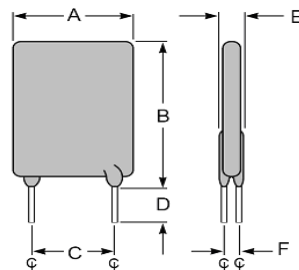
UL: File No. E211981
 C-UL: File No. E211981
 TÜV: File No. R50087018

3. Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Max. Current	Rated Voltage	Max. Int. Voltage	Typ. Power	Resistance	
	I _H , A	I _T , A	at 5xI _H ,s	I _{MAX} , A	V _{MAX} , V _{AC/DC}	V _{I-MAX} , V _{AC/DC}	P _d , W	R _{MIN}	R _{1MAX}
	Ohms	Ohms							
FRV040-240F	0.40	0.90	24.0	5.5	240	265	2.0	0.60	1.90

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, 22AWG.
 Soldering characteristics: MIL-STD-202, Method 208E.
 Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)

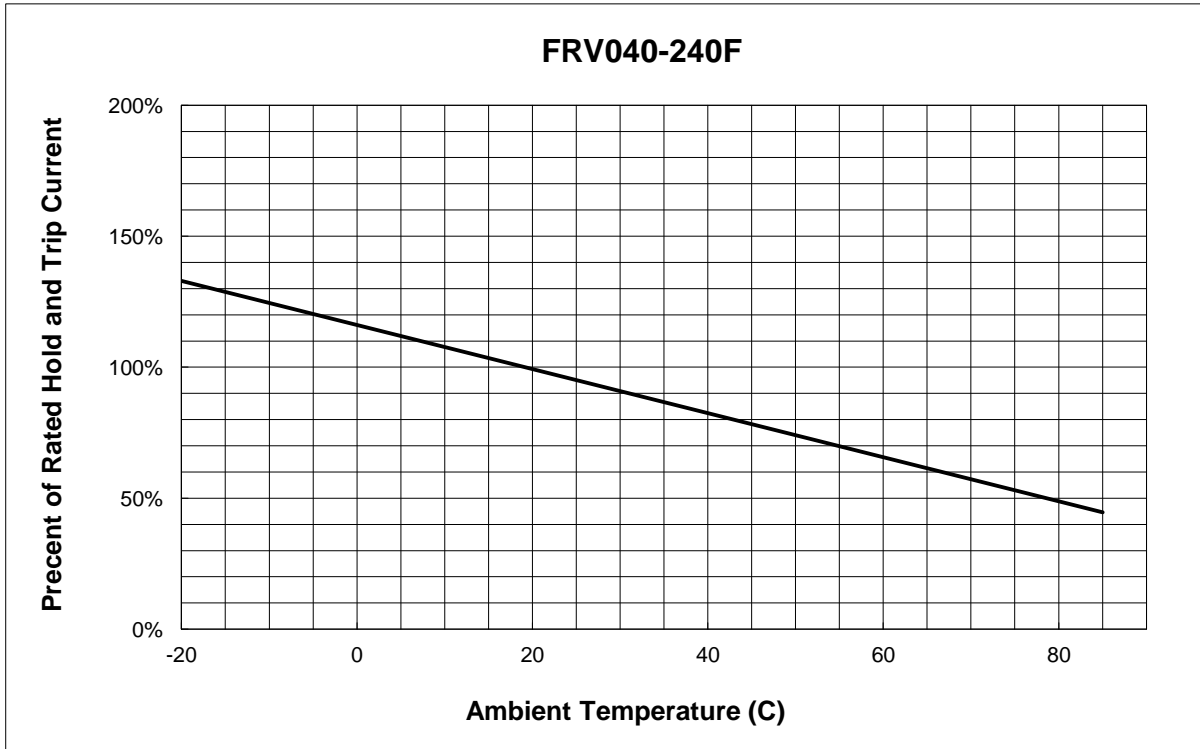


Lead Size: 22AWG
 Φ 0.65 mm Diameter

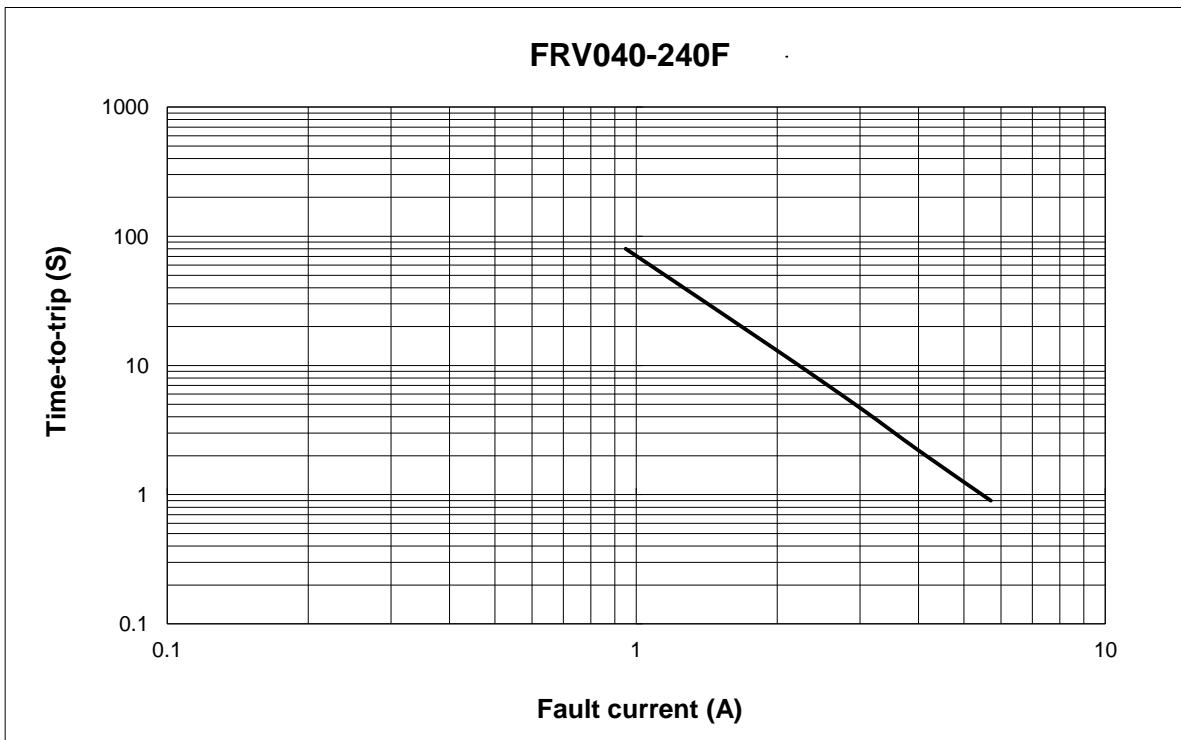
Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRV040-240F	11.5	19.5	5.1	7.6	3.8	1.8

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, 22 AWG.

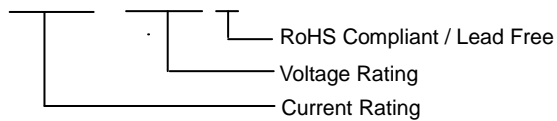
Soldering characteristics: MIL-STD-202, Method 208E.

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

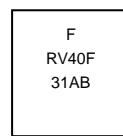
8. Part Numbering and Marking System

Part Numbering System

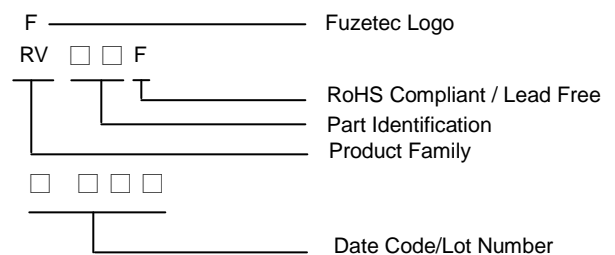
F R V □ □ □ - □ □ □ F



Part Marking System



Example



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

- Warning:** - Each product should be carefully evaluated and tested for their suitability of application.
- Operation beyond the specified maximum rating 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, including some inert material such as silicone based oil, lubricant and etc. Prolonged contact will damage the device performance.
 - Additional protection mechanism are strongly recommended to be used in conjunction with the PPTC device for protection against abnormal or failure conditions.
 - Avoid use of PPTC device in a constrained space such as potting material, housing and containers where have limited space to accommodate device thermal expansion and/or contraction.



NOTE : Specification subject to change without notice.