Radial Leaded PTC Resettable Fuse: FRV 040-240F

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 265$V_{AC/DC}$**
(d) **Operation Current: 400mA**
(e) **Maximum Operating Voltage: 240$V_{AC/DC}$**
(f) **Maximum Interrupt Voltage: 265$V_{AC/DC}$**
(g) **Temperature Range : -40℃ to 85℃**

2. Agency Recognition

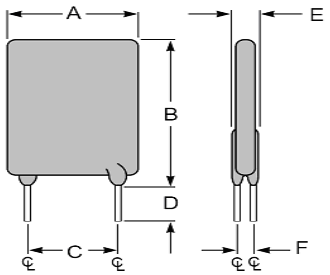
UL: File No. E211981
C-UL: File No. E211981
TÜV: File No. R50087018

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}, V_{AC}	Pd, W	ohms	ohms
FRV040-240F	0.40	0.90	24.0	5.5	240	2.0	0.60	1.90

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

4. Production Dimensions (millimeter)

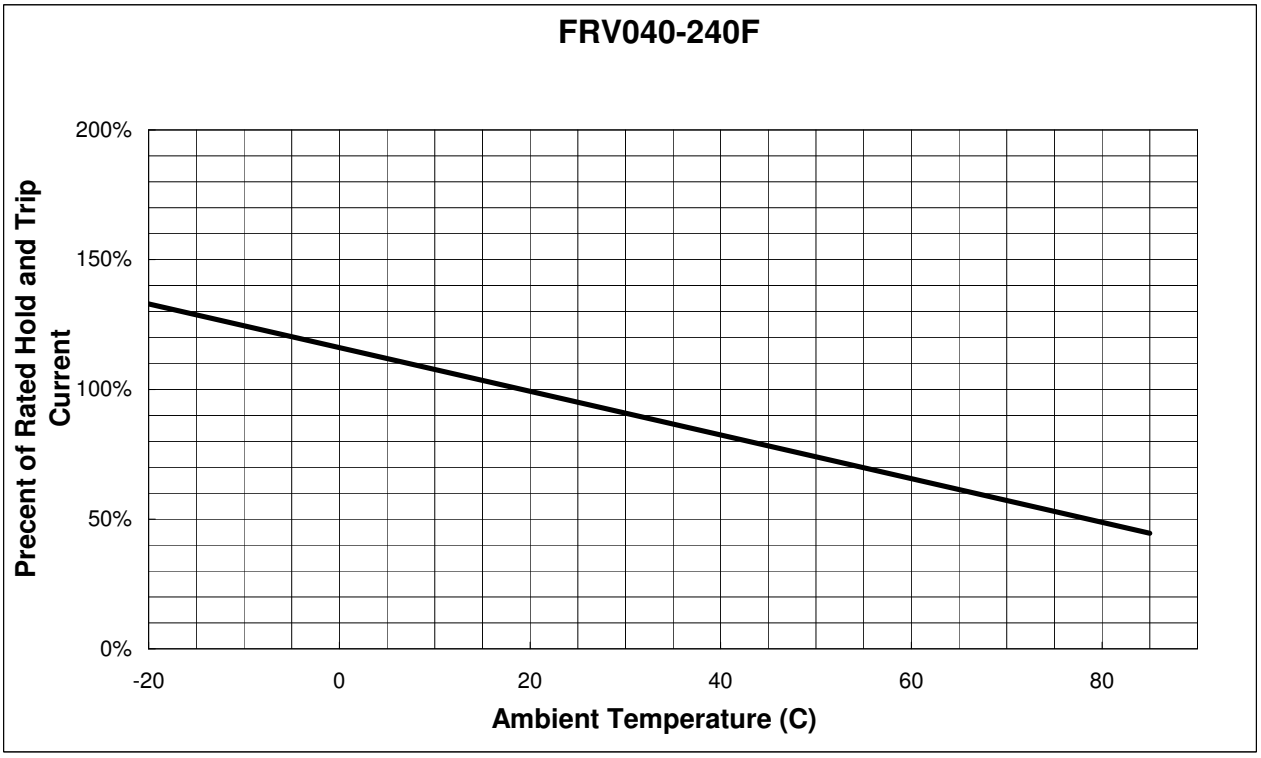


FRV 040-240F
Lead Size: 22AWG
Φ 0.65 mm Diameter

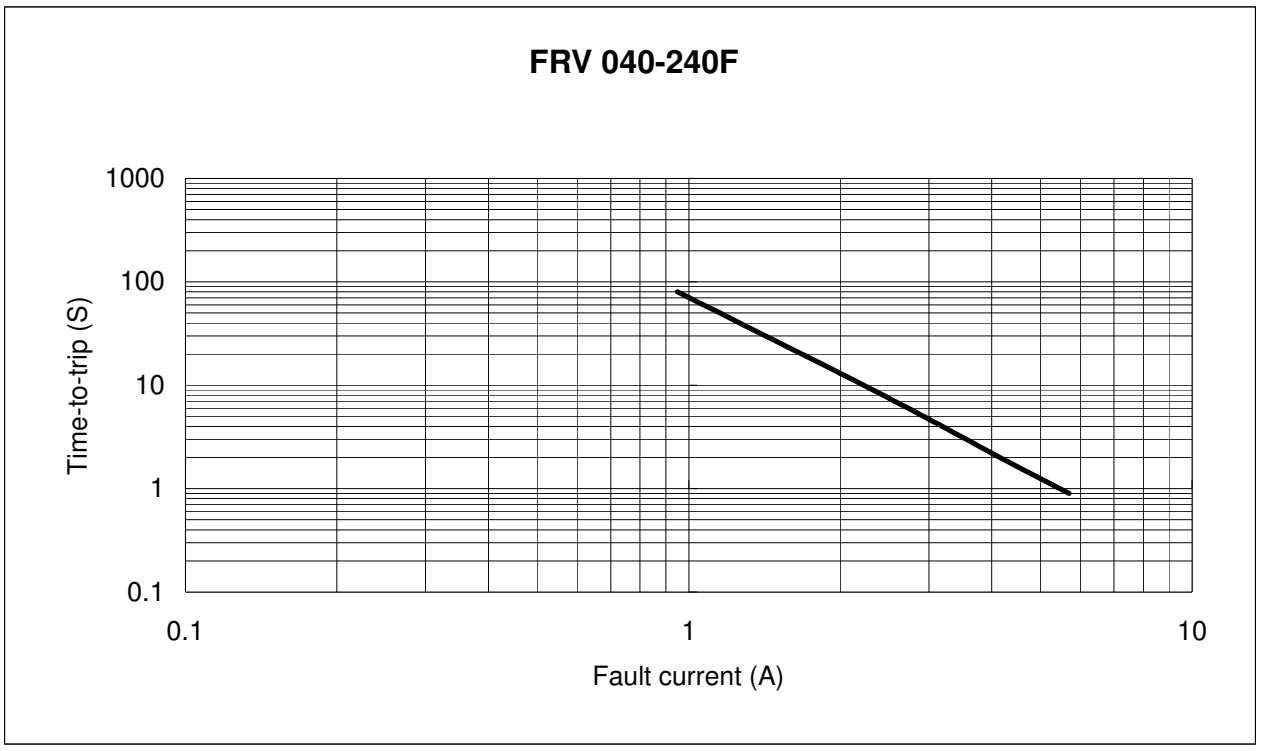
Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRV 040-240F	11.5	19.5	5.1	7.6	3.8	1.8

NOTE : Specification subject to change without notice.

5. Thermal Derating Curve



6. Typical Time-To-Trip at 23℃



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7. Material Specification

Lead material： Tin plated copper, 22 AWG.

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

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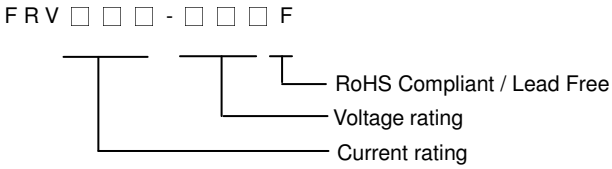
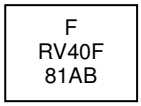
8. Part Numbering and Marking System

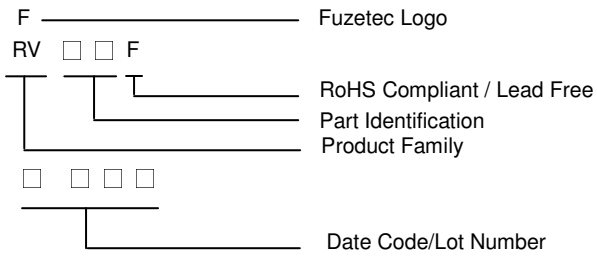
Part Numbering System



Part Marking System



Example



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.