



Radial Leaded PTC Resettable Fuse : FRK135-60F

1. Summary

- (a) **RoHS Compliant (Lead Free) product**
- (b) **Applications : Wide variety of electronic equipment**
- (c) **Product Features : Solid state, Radial leaded product ideal for up to 60V_{DC}**
- (d) **Operation Current : 1.35A**
- (e) **Maximum Operation Voltage : 60V_{DC}**
- (f) **Temperature Range : -40°C to 85°C**

2. Agency Recognition

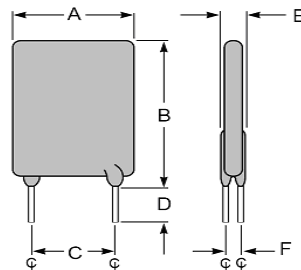
- UL : Pending
- C-UL: Pending
- TÜV: Pending

3. Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip		Max. Current	Rated Voltage	Typ. Power	Resistance	
	I _H , A	I _T , A	I, A	Time,s	I _{MAX} , A	V _{MAX} , VDC	P _d , W	R _{MIN}	R _{1MAX}
	Ohms	Ohms							
FRK135-60F	1.35	2.70	8.0	4.5	40	60	2.30	0.110	0.370

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,20AWG.
 Soldering characteristics:MIL-STD-202, Method 208E.
 Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)



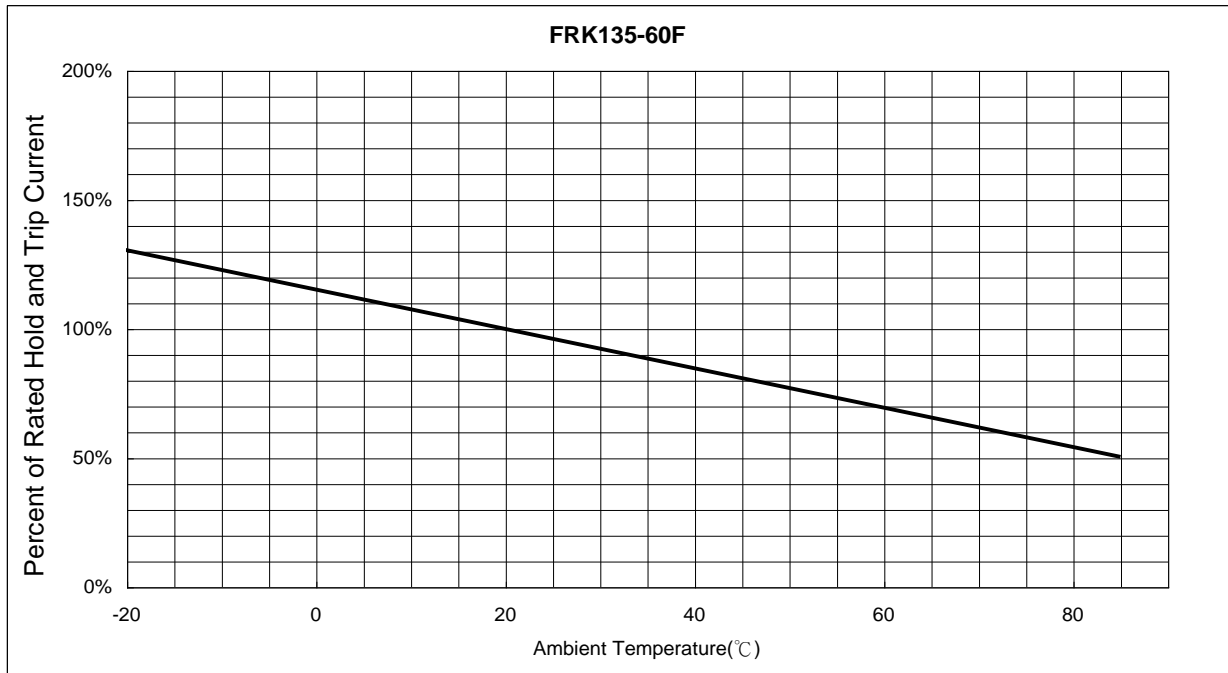
FRK135-60F
 Lead Size : 20AWG
 Φ 0.81 mm Diameter

Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRK135-60F	10.20	17.00	5.1	7.6	3.81	1.4

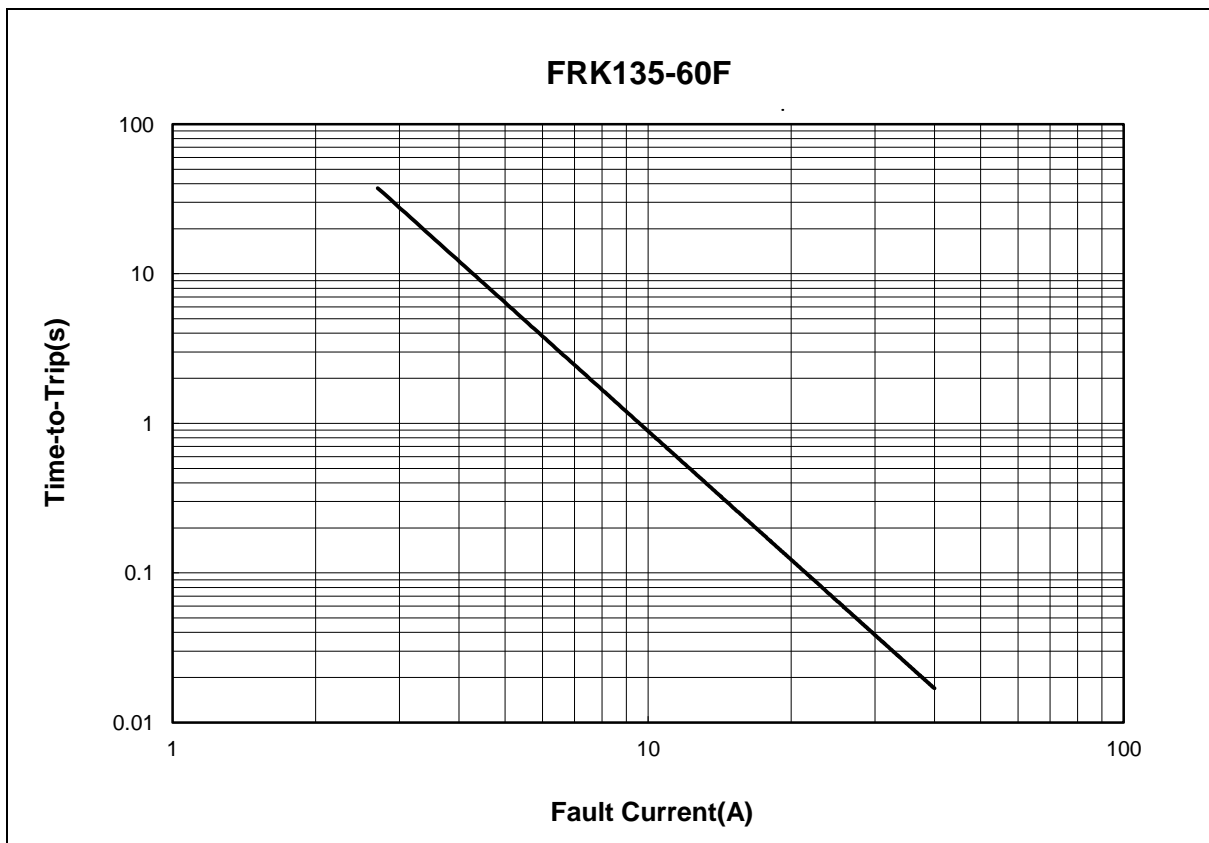
NOTE : Specification subject to change without notice.



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, 20 AWG.

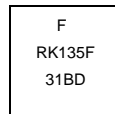
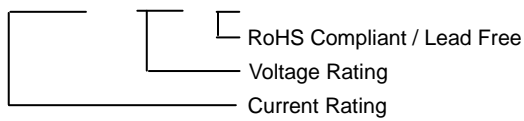
Soldering characteristics:MIL-STD-202, Method 208E.

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

8. Part Numbering and Marking System

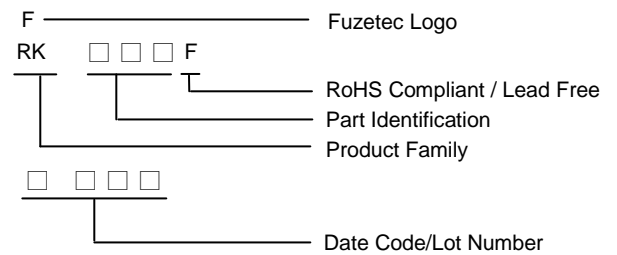
Part Numbering System

F R K □ □ □ - □ □ F



Example

Part Marking System



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

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Resettable Fuses - PPTC](#) category:

Click to view products by [Fuzetec](#) manufacturer:

Other Similar products are found below :

[RF0077-000](#) [RF0627-000](#) [RF3301-000](#) [RF3382-000](#) [RF3394-000](#) [RF3399-000](#) [SMD125-2](#) [RF1973-000](#) [RF2531-000](#) [RF2873-000](#) [RF3060-000](#) [RF3311-000](#) [TR600-150Q-B-0.5-0.130](#) [RXE090](#) [5E4795/04-1502](#) [TRF250-080T-B-1.0-0.125](#) [SMD100-2](#) [NIS5431MT1TXG](#) [SMD250-2](#) [RS30-090](#) [RS30-600](#) [RS30-800](#) [RS30-900](#) [RS60RB-160](#) [RS60SB-250](#) [SB250-145](#) [K30U400](#) [0ZCH0110AF2E](#) [BK60-110-DI-E0.6](#) [BK250-120-SZ-E0.6](#) [BK60-010-DI-E0.5](#) [BK250-040-DY-E0.6](#) [RF2631-000](#) [NIS4461MT3TXG](#) [NIS5420MT2TXG](#) [NIS5420MT3TXG](#) [NIS6420MT1TWG](#) [RF5032-000](#) [RF5051-000](#) [RF5105-000](#) [RF5062-000](#) [RF5055-000](#) [RF5052-000](#) [2920L075/72MR](#) [BSMD0603-025-24V](#) [BSMD0402L-005](#) [BSMD0603-010-9V](#) [BSMD1812-020-60V](#) [BSMD2920-400-30V](#) [BSMD0603-010-12V](#)