



Axial Leaded PTC Resettable Fuse: FSL190F

1. Summary

- (a) **RoHS Compliant (Lead Free) Product**
- (b) **Applications: Laptop Computer, Mobile phone battery packs, Rechargeable battery packs, Lithium cell and battery packs**
- (c) **Product Features: Low resistance, Solid state**
- (d) **Operation Current: 1.9A**
- (e) **Maximum Voltage: 6V**
- (f) **Temperature Range : -40°C to 85°C**

2. Agency Recognition

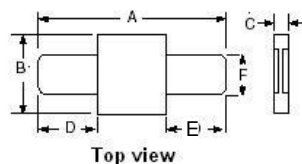
- UL: Pending
- C-UL: Pending
- TÜV: Pending

3. Electrical Characteristics (23°C)

| Part Number | Hold Current | Trip Current | Max. Time to Trip | Rated Voltage | Maximum Current | Typical Power | Resistance Tolerance | | |
|----------------|-------------------|-------------------|-------------------------|------------------------------------|----------------------|--------------------|----------------------|------------------|-------------------|
| | | | | | | | R _{MIN} | R _{MAX} | R _{1MAX} |
| | I _H ,A | I _T ,A | at 5xI _H , s | V _{MAX} , V _{dc} | I _{MAX} , A | P _d , W | Ω | Ω | Ω |
| FSL190F | 1.9 | 4.9 | 3.0 | 6 | 50 | 1.0 | 0.006 | 0.014 | 0.024 |

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: 0.1 mm nominal thickness, quarter-hard nickel.
 Insulating material: Polyester tape.

4. Production Dimensions (millimeter)

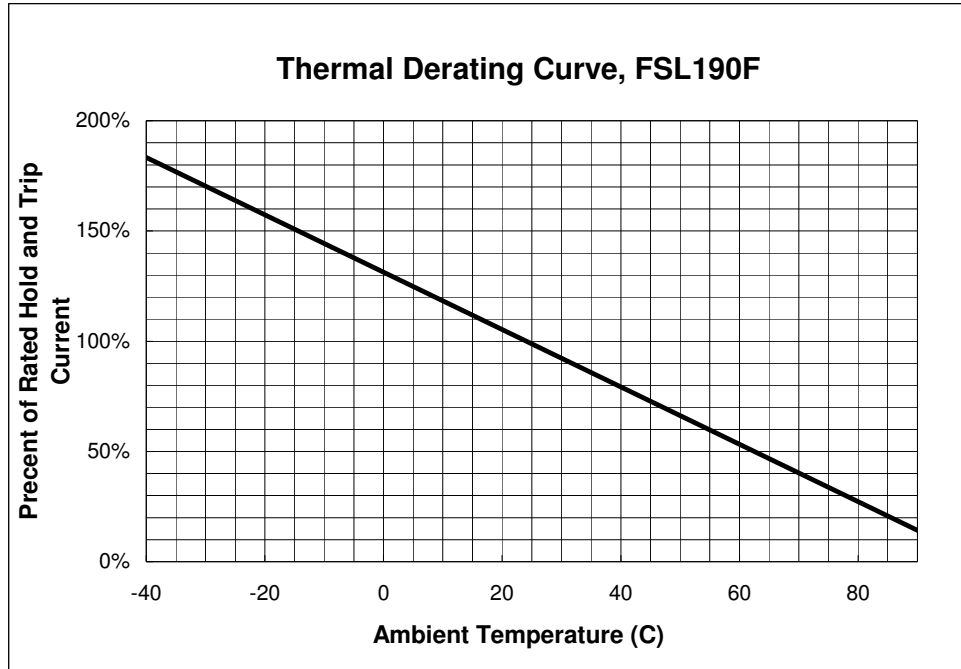


| Part Number | A | | B | | C | | D | | E | | F | |
|----------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| FSL190F | 9.20 | 10.80 | 3.15 | 3.45 | 0.55 | 0.95 | 2.15 | 3.25 | 2.15 | 3.25 | 2.20 | 2.40 |

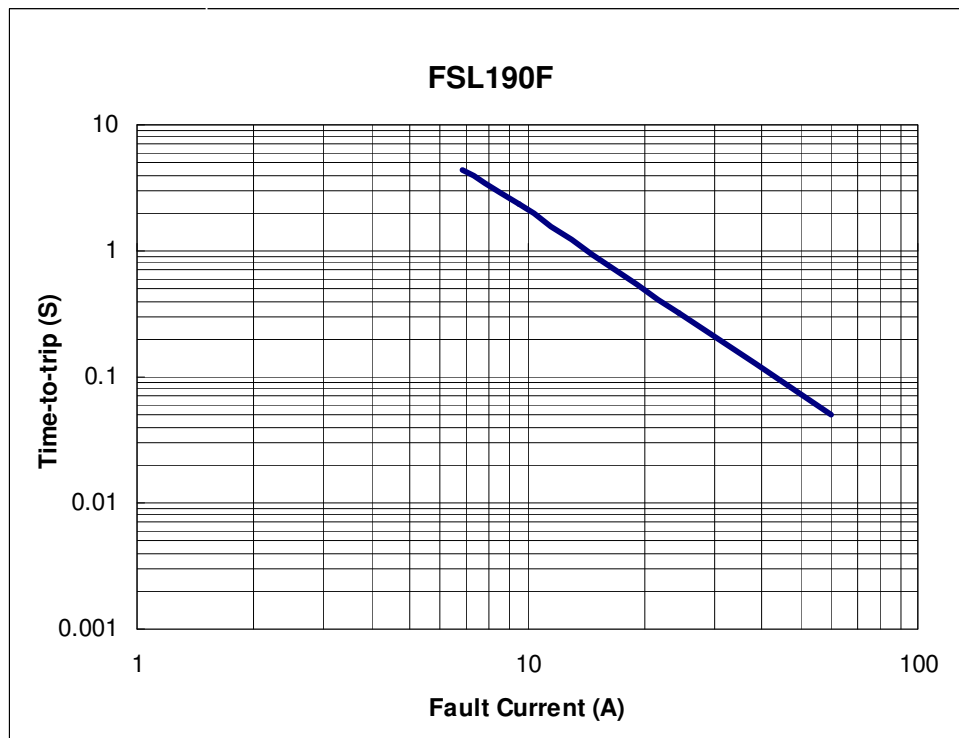
NOTE : Specification subject to change without notice.



5. Thermal Derating Curve



6. Typical Time-To-Trip at 23°C



NOTE : Specification subject to change without notice.

| | | | | |
|---|---|------------------|----------|-------------|
|  FUZETEC TECHNOLOGY CO., LTD. | NO. | PQ30-102E | | |
| | Product Specification and Approval | Version | 2 | Page |

7. Material Specification

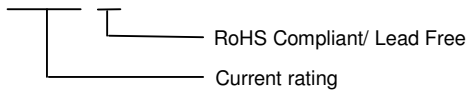
Lead material: 0.1 mm nominal thickness, quarter-hard nickel

Insulating material: Polyester tape

8. Part Numbering and Marking System

Part Numbering System

FSL □ □ □ F



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.

NOTE : Specification subject to change without notice.