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|  FUZETEC TECHNOLOGY CO., LTD. | NO. | PQ05-101E | | |
| | Product Specification and Approval Sheet | Version | 9 | Page |

Radial Leaded PTC Resettable Fuse: FUSB Series

1. Summary

- (a) **RoHS Compliant (Lead Free) Product**
- (b) **Applications: Low voltage USB equipment and Computers & peripherals**
- (c) **Product Features: Low resistance, Fast trip time, Low trip-to-hold ratio**
- (d) **Operation Current: 0.75A~2.50A**
- (e) **Maximum Voltage: 16V/30Vdc**
- (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 | |
|-----------------|--------------|--------------|--------------------|--------------------|--------------|---------------|------------|------------|-------|
| | | | Current | Time | | | | RMIN | R1MAX |
| | | | I _H , A | I _T , A | | | | A | Sec |
| FUSB075F | 0.75 | 1.30 | 8.0 | 0.4 | 40 | 16 | 0.3 | 0.08 | 0.23 |
| FUSB090F | 0.90 | 1.80 | 8.0 | 1.2 | 40 | 16/30 | 0.6 | 0.07 | 0.18 |
| FUSB110F | 1.10 | 2.20 | 8.0 | 2.3 | 40 | 16/30 | 0.7 | 0.05 | 0.14 |
| FUSB120F | 1.20 | 2.00 | 8.0 | 0.7 | 40 | 16 | 0.6 | 0.04 | 0.14 |
| FUSB135F | 1.35 | 2.70 | 8.0 | 4.5 | 40 | 16/30 | 0.8 | 0.04 | 0.12 |
| FUSB155F | 1.55 | 2.70 | 7.8 | 2.2 | 40 | 16 | 0.7 | 0.03 | 0.12 |
| FUSB160F | 1.60 | 3.20 | 8.0 | 9.0 | 40 | 16/30 | 0.9 | 0.03 | 0.11 |
| FUSB185F | 1.85 | 3.70 | 8.0 | 10.0 | 40 | 16/30 | 1.0 | 0.03 | 0.09 |
| FUSB250F | 2.50 | 5.00 | 8.0 | 40.0 | 40 | 16/30 | 1.2 | 0.02 | 0.07 |

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 clad steel,24 AWG.
Soldering characteristics: Solder ability per ANSI/J-STD 002
Solder heat withstand per IEC 68-2-20
Insulating coating:Flame retardant epoxy polymer, meets UL 94V-0 requirement.

NOTE : Specification subject to change without notice.

2019/11/13



4. Production Dimensions (millimeter)

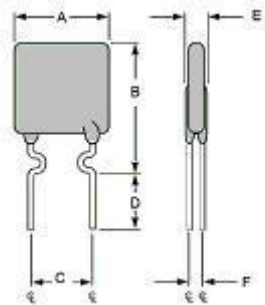


Fig.1

Lead Size: 24AWG

Φ 0.51 mm Diameter

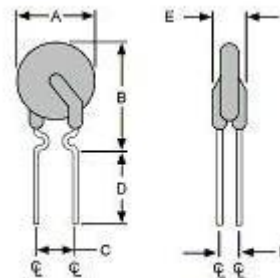


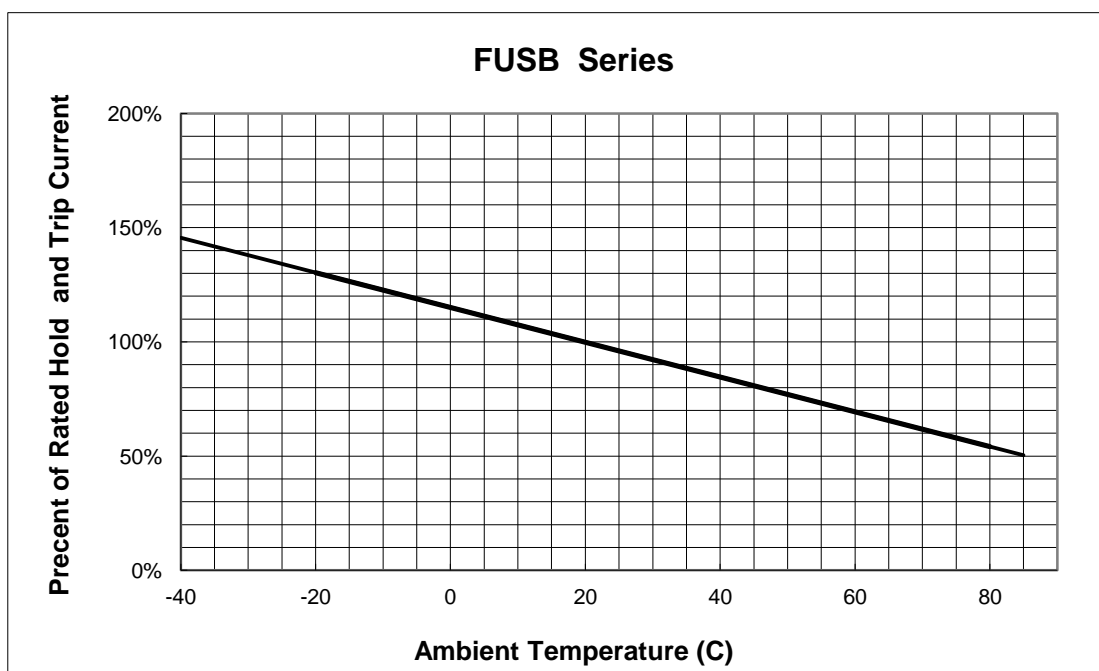
Fig.2

Lead Size: 24AWG

Φ 0.51 mm Diameter

| Part Number | Fig | A | B | C | D | E | F |
|-------------|-----|---------|---------|---------|---------|---------|---------|
| | | Maximum | Maximum | Typical | Minimum | Maximum | Typical |
| FUSB075F | 2 | 6.9 | 11.4 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB090F | 1 | 7.4 | 12.2 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB110F | 1 | 7.4 | 14.2 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB120F | 2 | 6.9 | 11.7 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB135F | 1 | 8.9 | 13.5 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB155F | 2 | 6.9 | 11.7 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB160F | 1 | 8.9 | 15.2 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB185F | 1 | 10.2 | 15.7 | 5.1 | 7.6 | 3.0 | 0.8 |
| FUSB250F | 1 | 11.4 | 18.3 | 5.1 | 7.6 | 3.0 | 0.8 |

5. Thermal Derating Curve

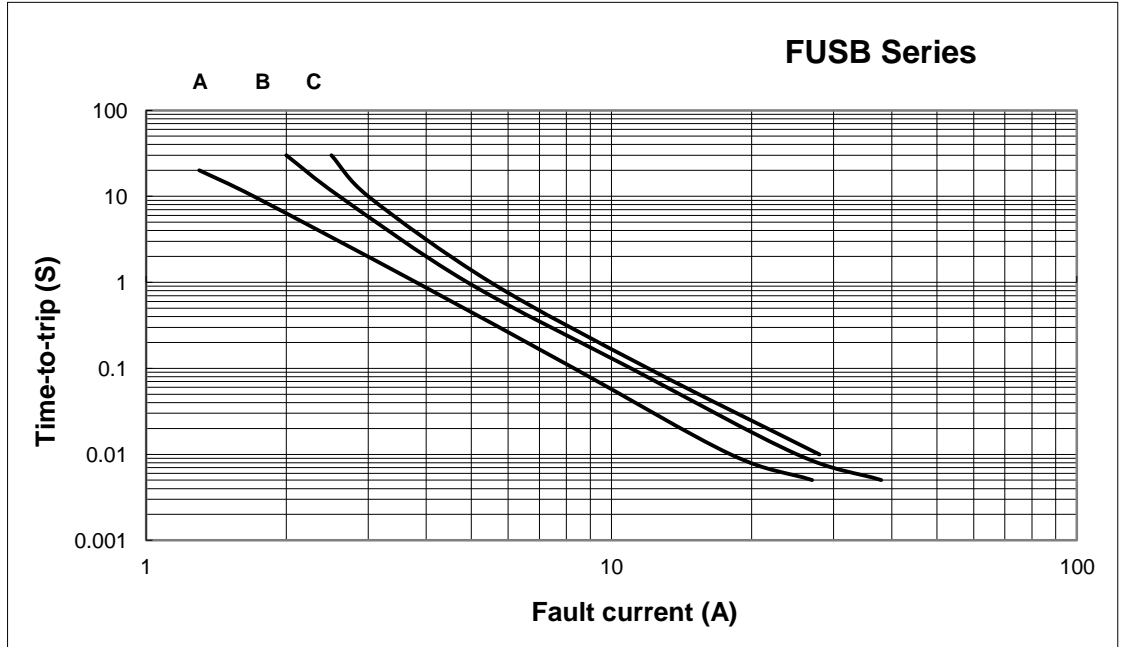


NOTE : Specification subject to change without notice.

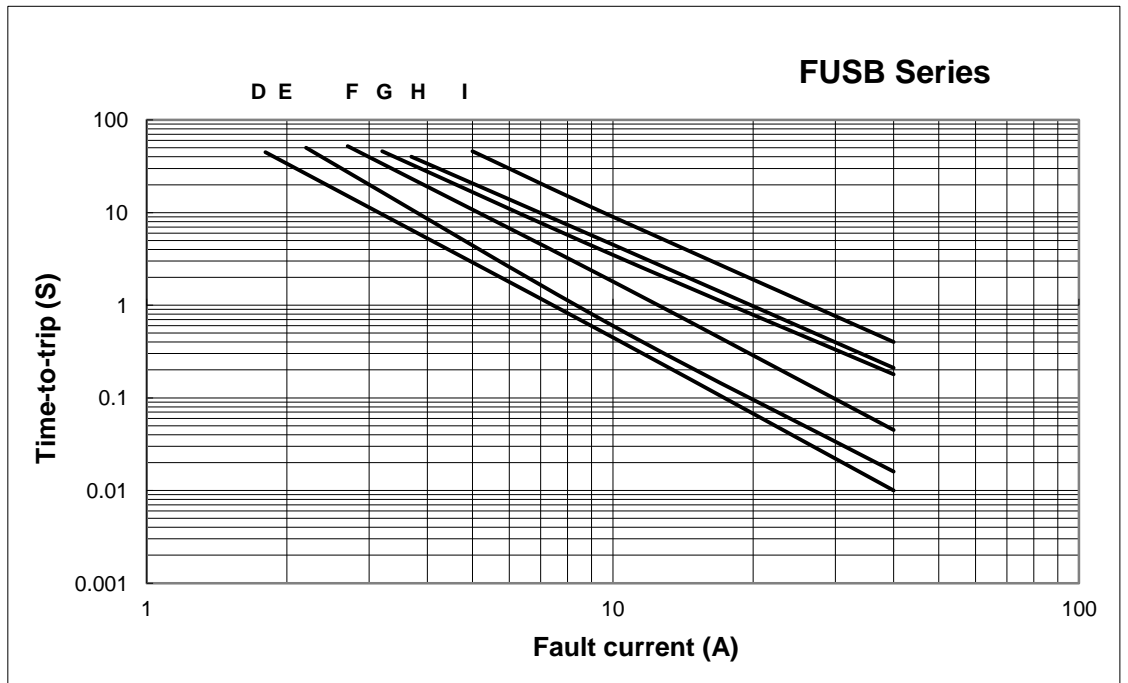


6. Typical Time-To-Trip at 23°C

- A = FUSB075F
- B = FUSB120F
- C = FUSB155F



- D = FUSB090F
- E = FUSB110F
- F = FUSB135F
- G = FUSB160F
- H = FUSB185F
- I = FUSB250F



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7. Material Specification

Lead material: Tin plated copper clad steel, 24 AWG

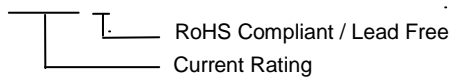
Soldering characteristics: MIL-STD-202, Method 208E

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

8. Part Numbering and Marking System

Part Numbering System

F U S B □ □ □ F



Part Marking System

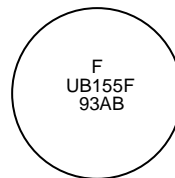
F _____ Fuzetec Logo

UB □ □ □ F

_____ RoHS Compliant / Lead Free
 _____ Part Identification
 _____ Product Family

□ □ □ □

_____ Date Code/Lot Number



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.

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