

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,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.

4. Production Dimensions (millimeter)

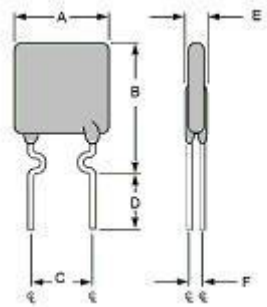


Fig.1

Lead Size: 24AWG

Φ 0.51 mm Diameter

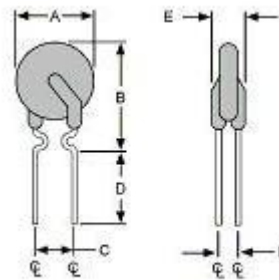


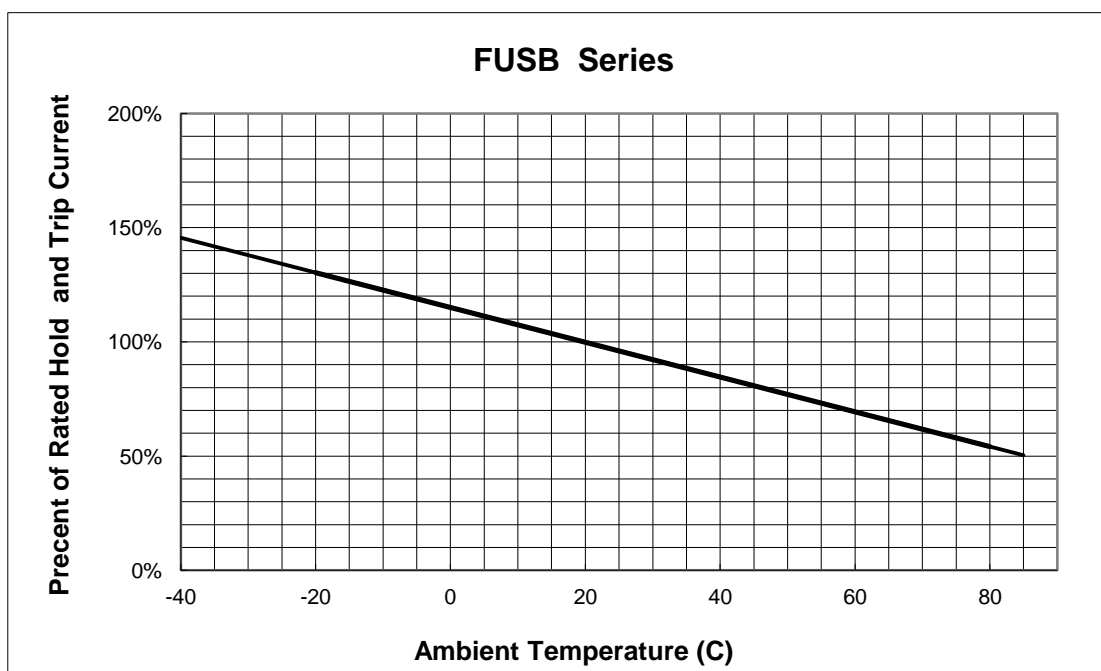
Fig.2

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

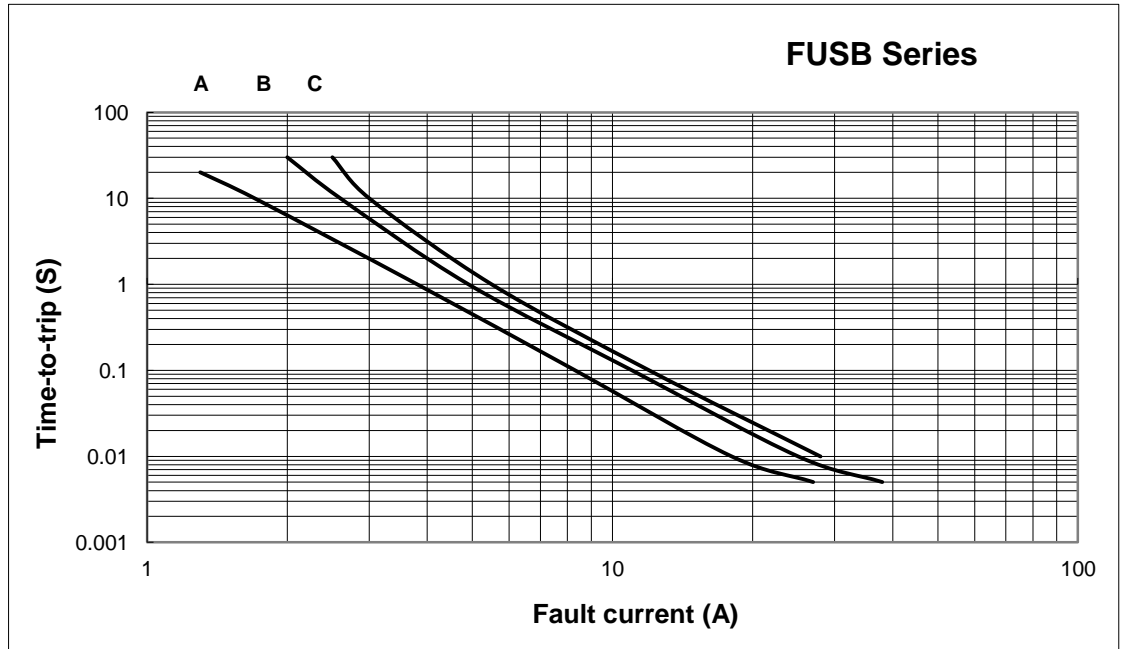
5. Thermal Derating Curve



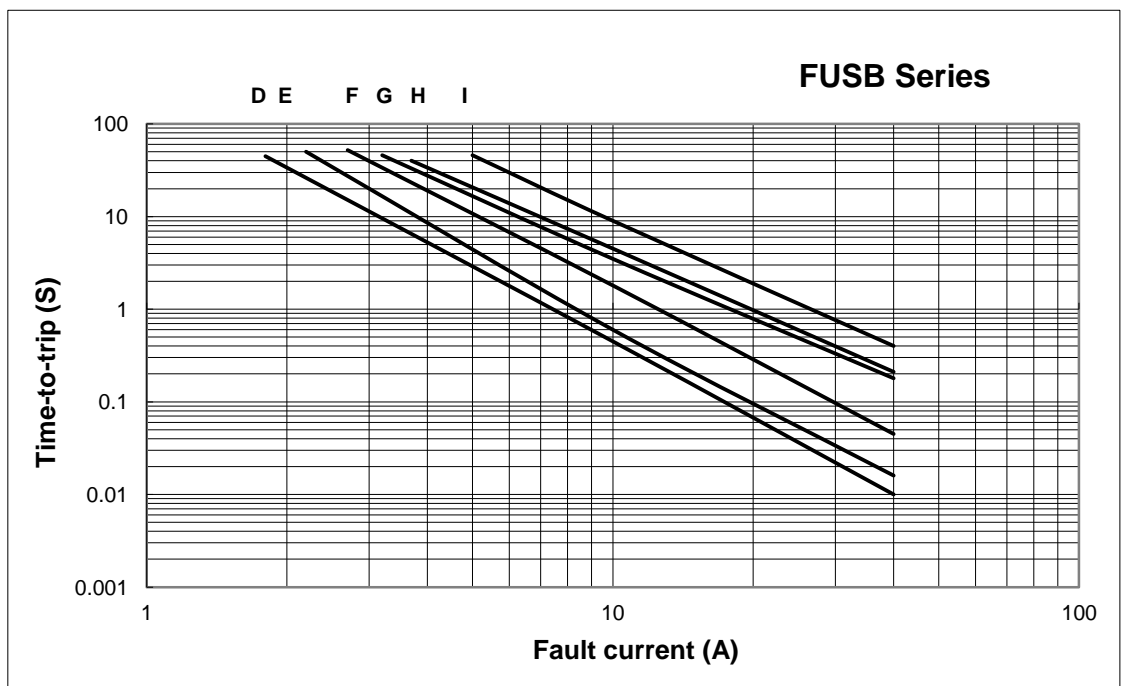
NOTE : Specification subject to change without notice.

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



7. Material Specification

Lead material: Tin plated copper, 24 AWG

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

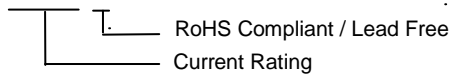
Insulating coating: Flame retardant epoxy, meet UL-94V-0 requirement

NOTE : Specification subject to change without notice.

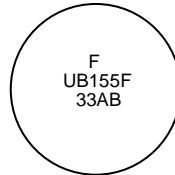
8. Part Numbering and Marking System

Part Numbering System

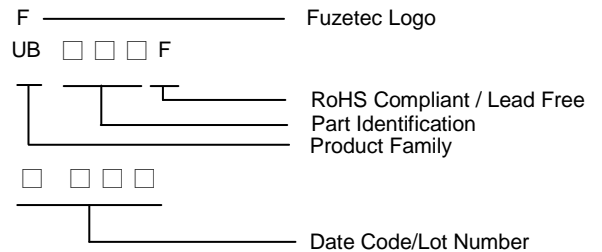
F U S B □ □ □ F



Part Marking System



Example



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.