



## Radial Leaded PTC Resettable Fuse: FUSB Series

### 1. Summary

- (a) **Applications:** Low voltage USB equipment and Computers & peripherals
- (b) **Product Features:** Low resistance, Fast trip time, Low trip-to-hold ratio
- (c) **Operation Current:** 750mA~2.5A
- (d) **Maximum Voltage:** 16V/30V
- (e) **Temperature Range :** -40°C to 85°C

### 2. Agency Recognition

**UL:** File No. E211981  
**C-UL:** File No. E211981  
**TÜV:** File No. R3-50004084

### 3. Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip		Maximum Current	Rated Voltage	Typical Power	Resistance Tolerance				
			at 8A	at 5xI <sub>H</sub>				I <sub>MAX</sub> , A	V <sub>MAX</sub> , Vdc	Pd, W	R <sub>MIN</sub>	R <sub>1MAX</sub>
											ohms	ohms
<b>FUSB075</b>	0.75	1.30	0.4	--	40	16	0.3	0.08	0.23			
<b>FUSB090</b>	0.90	1.80	1.2	5.9	40	16/30	0.6	0.07	0.18			
<b>FUSB110</b>	1.10	2.20	2.3	6.6	40	16/30	0.7	0.05	0.14			
<b>FUSB120</b>	1.20	2.00	0.5	--	40	16	0.6	0.04	0.14			
<b>FUSB135</b>	1.35	2.70	4.5	7.3	40	16/30	0.8	0.04	0.12			
<b>FUSB155</b>	1.55	2.70	0.6	--	40	16	0.7	0.03	0.12			
<b>FUSB160</b>	1.60	3.20	9.0	8.0	40	16/30	0.9	0.03	0.11			
<b>FUSB185</b>	1.85	3.70	10.0	8.7	40	16/30	1.0	0.03	0.09			
<b>FUSB250</b>	2.50	5.00	40.0	10.3	40	16/30	1.2	0.02	0.07			

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.

I<sub>T</sub>=Trip current-minimum current at which the device will always trip at 23°C still air.

V<sub>MAX</sub>=Maximum voltage device can withstand without damage at its rated current.

I<sub>MAX</sub>= Maximum fault current device can withstand without damage at rated voltage (V<sub>MAX</sub>).

Pd=Typical power dissipated from device when in tripped state in 23°C still air environment.

R<sub>MIN</sub>=Minimum device resistance at 23°C.

R<sub>1MAX</sub>=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

FUSB 120 :Test Tb, method 1a, condition a; can withstand 5 second at 260°C±5°C

All others: Test Tb, method 1a, condition a; can withstand 10 second at 260°C±5°C

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

**NOTE :** Specification subject to change without notice.



### 4. Production Dimensions (millimeter)

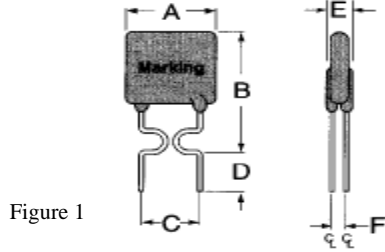


Figure 1

Lead Size: 24AWG  
Φ 0.51 mm Diameter

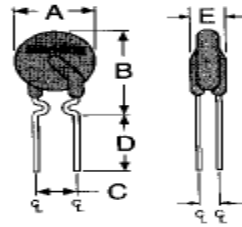
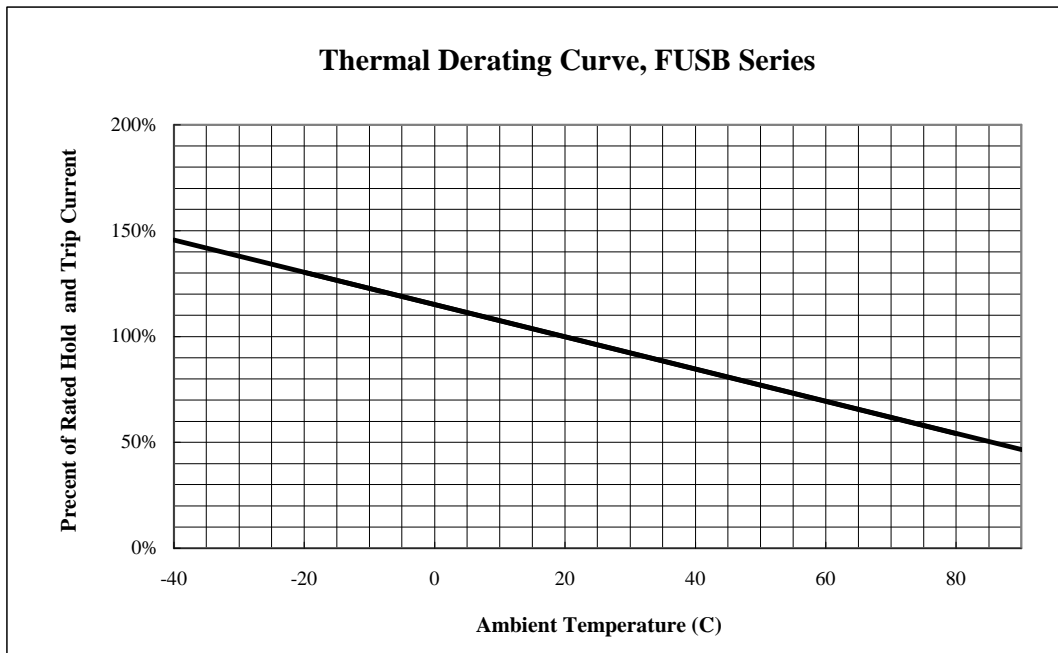


Figure 2

Lead Size: 24AWG  
Φ 0.51 mm Diameter

Part Number	Fig	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
FUSB075	2	6.9	11.4	5.1	7.6	3.0	0.8
FUSB090	1	7.4	12.2	5.1	7.6	3.0	0.8
FUSB110	1	7.4	14.2	5.1	7.6	3.0	0.8
FUSB120	2	6.9	11.7	5.1	7.6	3.0	0.8
FUSB135	1	8.9	13.5	5.1	7.6	3.0	0.8
FUSB155	2	6.9	11.7	5.1	7.6	3.0	0.8
FUSB160	1	8.9	15.2	5.1	7.6	3.0	0.8
FUSB185	1	10.2	15.7	5.1	7.6	3.0	0.8
FUSB250	1	11.4	18.3	5.1	7.6	3.0	0.8

### 5. Thermal Derating Curve

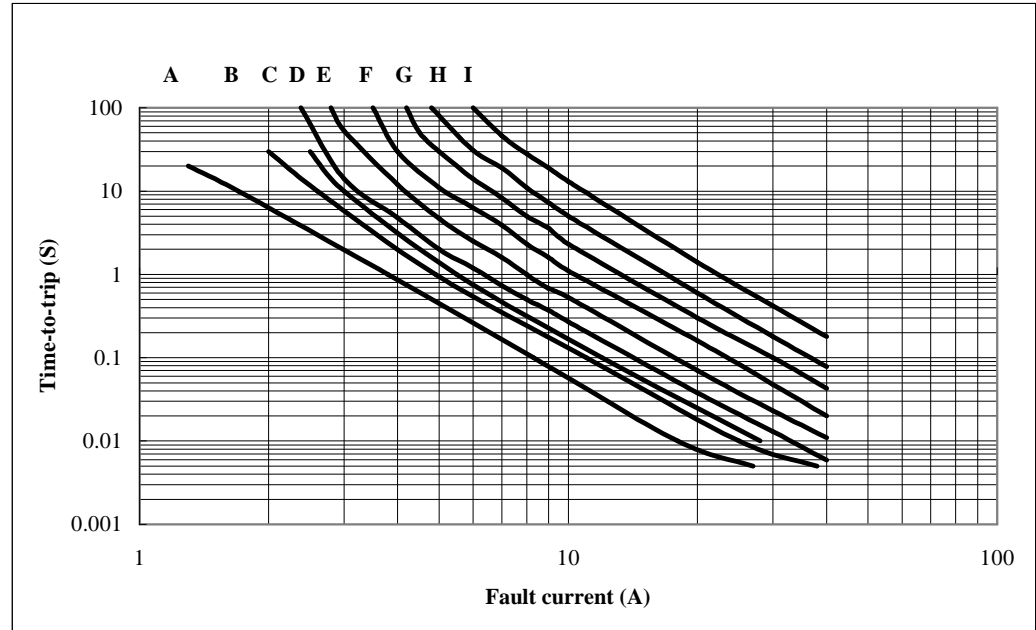


NOTE : Specification subject to change without notice.



### 6. Typical Time-To-Trip at 23°C

- A = FUSB075
- B = FUSB120
- C = FUSB155
- D = FUSB090
- E = FUSB110
- F = FUSB135
- G = FUSB160
- H = FUSB185
- I = FUSB250



### 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

### 8. Part Numbering and Marking System

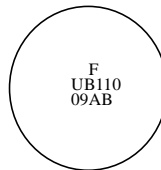
#### Part Numbering System

F U S B □ □ □



Current rating

#### Part Marking System

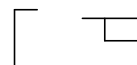


Example

F ————— Fuzetec Logo

UB □ □ □

Part Identification



Product Family

□ □ □ □

Date Code/Lot Number

**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.

Authorized Distributor in Korea : Parts Bank Co., Ltd. □  
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