Summary

- RoHS Compliant (Lead Free) Product
- Applications: Low voltage USB equipment andComputers & peripherals
- Product Features: Low resistance, Fast trip time, Low trip-to-hold ratio
- Operation Current: 0.75A~2.50A
- Maximum Voltage: 16V/30VDC
- Temperature Range : -40to 85

Agency Recognition

UL: File No. E211981
C-UL: File No. E211981
TÜV: File No. R50004084

Electrical Characteristics (23℃)

Part Number	Hold Current	Trip Current	Max.Time to Trip		Max. Current	Rated Voltage	Typ. Power	Resistance	
			Current	Time				R_{MIN}	$R1_{MAX}$
	I_H, A	I_T, A	A	Sec	I_{MAX}, A	V_{MAX}, V_{DC}	Pd, W	Ohms	Ohms
TUSB075F	0.75	1.30	8.0	0.4	40	16	0.3	0.08	0.23
TUSB090F	0.90	1.80	8.0	1.2	40	16/30	0.6	0.07	0.18
TUSB110F	1.10	2.20	8.0	2.3	40	16/30	0.7	0.05	0.14
TUSB120F	1.20	2.00	8.0	0.7	40	16	0.6	0.04	0.14
TUSB135F	1.35	2.70	8.0	4.5	40	16/30	0.8	0.04	0.12
TUSB155F	1.55	2.70	7.8	2.2	40	16	0.7	0.03	0.12
TUSB160F	1.60	3.20	8.0	9.0	40	16/30	0.9	0.03	0.11
TUSB185F	1.85	3.70	8.0	10.0	40	16/30	1.0	0.03	0.09
TUSB250F	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℃ still air.
I_T=Trip current-minimum current at which the device will always trip at 23℃ 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}).
Pd=Typical power dissipated from device when in tripped state in 23℃ still air environment.
R_{MIN}=Minimum device resistance at 23℃.
$R1_{MAX}$=Maximum device resistance at 23℃, 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.

Production Dimensions (millimeter)

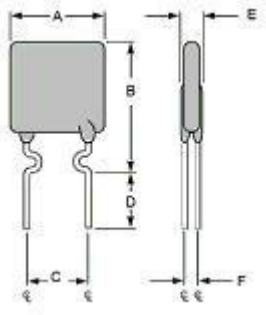


Fig.1

Lead Size: 24AWG

Φ 0.51 mm Diameter

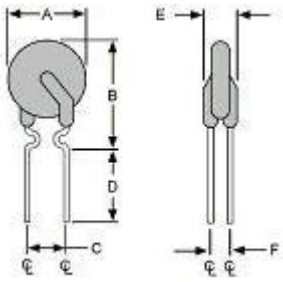


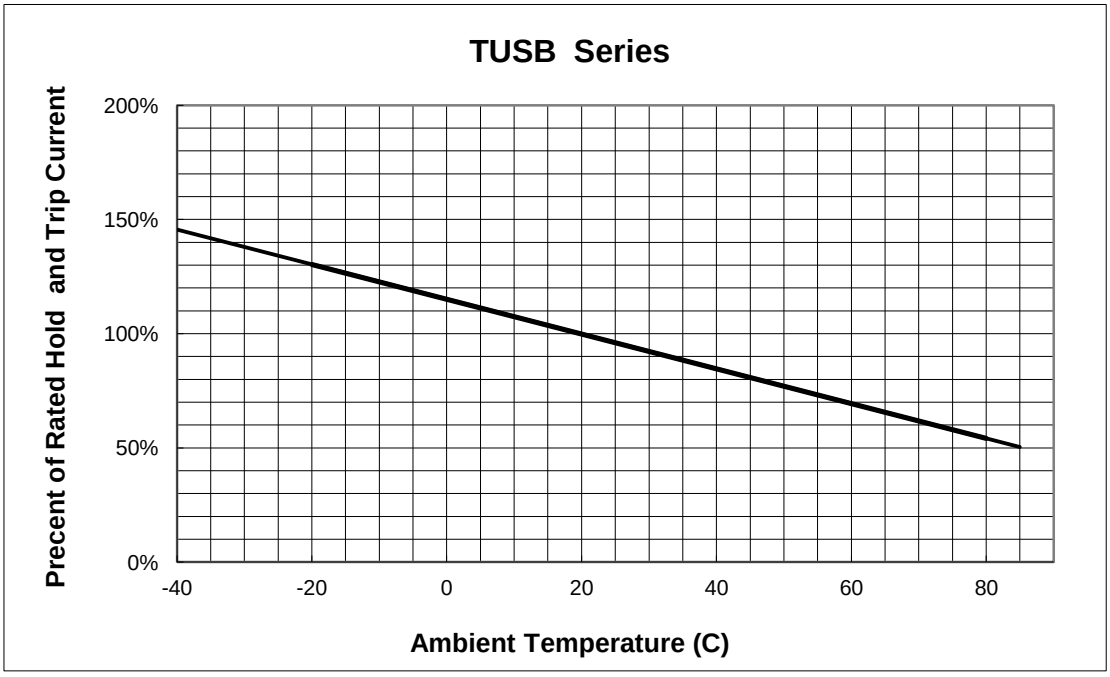
Fig.2

Lead Size: 24AWG

Φ 0.51 mm Diameter

Part Number	Fig	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
TUSB075F	2	6.9	11.4	5.1	7.6	3.0	0.8
TUSB090F	1	7.4	12.2	5.1	7.6	3.0	0.8
TUSB110F	1	7.4	14.2	5.1	7.6	3.0	0.8
TUSB120F	2	6.9	11.7	5.1	7.6	3.0	0.8
TUSB135F	1	8.9	13.5	5.1	7.6	3.0	0.8
TUSB155F	2	6.9	11.7	5.1	7.6	3.0	0.8
TUSB160F	1	8.9	15.2	5.1	7.6	3.0	0.8
TUSB185F	1	10.2	15.7	5.1	7.6	3.0	0.8
TUSB250F	1	11.4	18.3	5.1	7.6	3.0	0.8

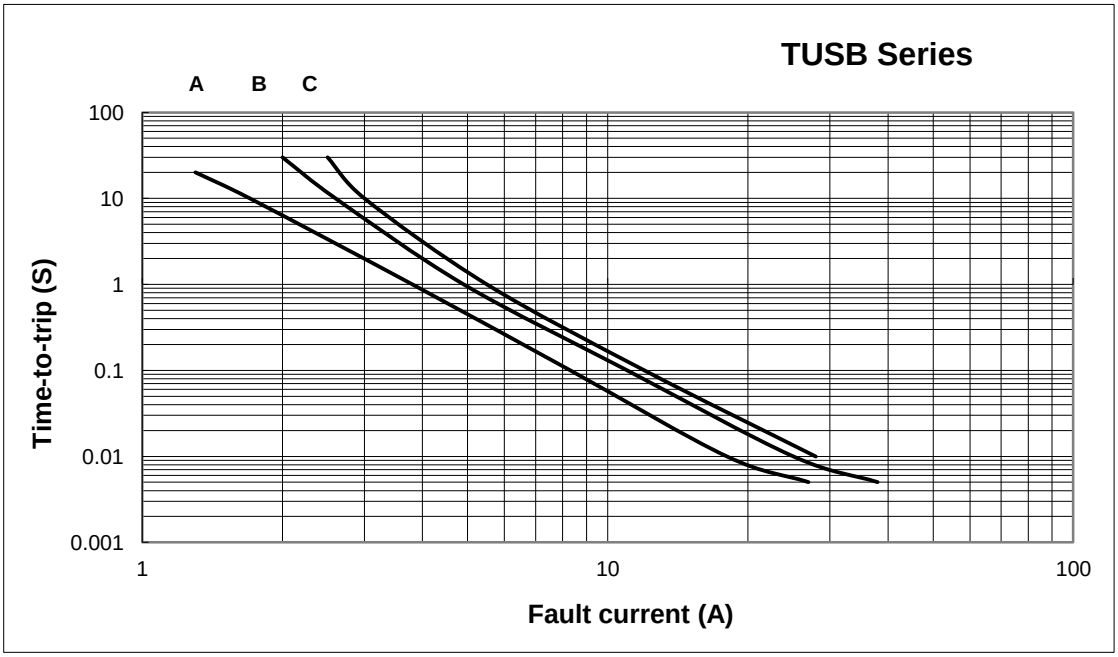
Thermal Derating Curve



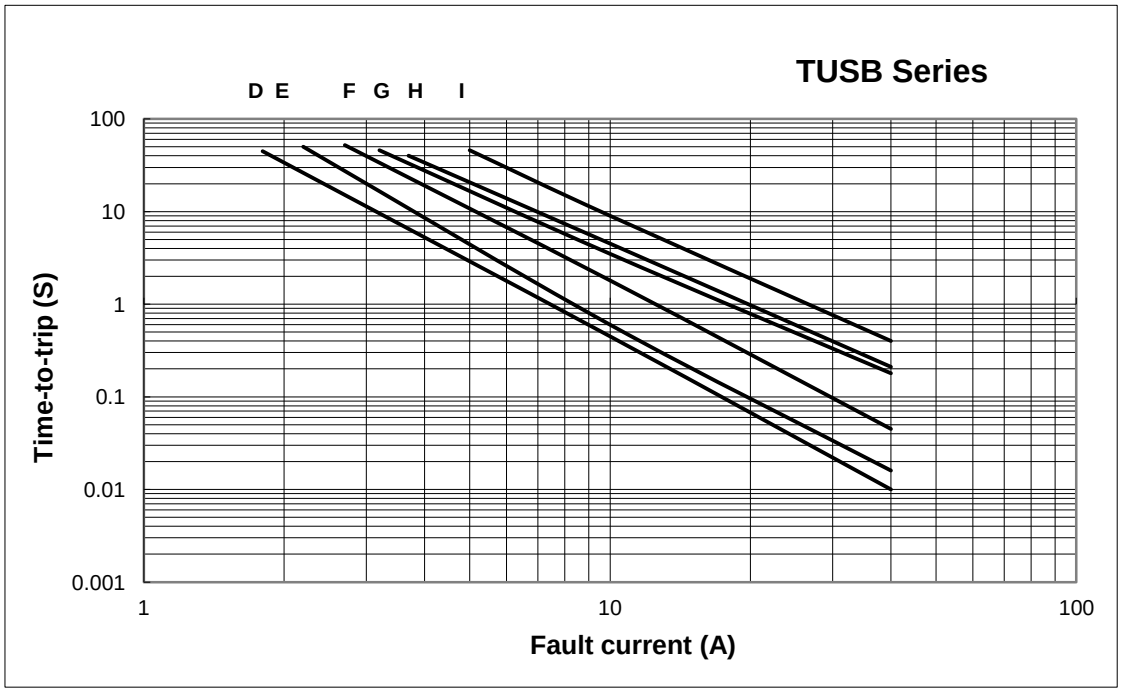
NOTE : Specification subject to change without notice.

Typical Time -To-Trip at 23℃

A = TUSB075F
B = TUSB120F
C =TUSB 155F



D = TUSB090F
E = TUSB110F
F = TUSB135F
G = TUSB160F
H = TUSB185F
I = TUSB250F



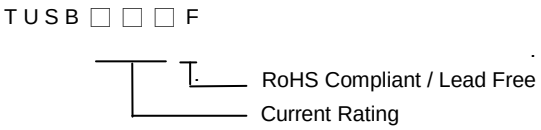
Material Specification

Lead material: Tin plated copper, 24 AWG
Soldering characteristics: MIL-STD-202, Method 208E
Insulating coating:Flame retardant epoxy ,meet UL-94V-0 requirement

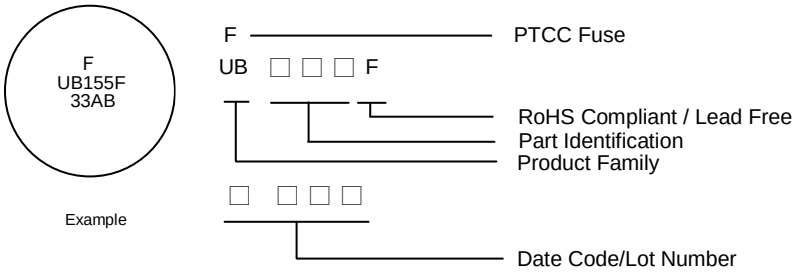
NOTE : Specification subject to change without notice.

Part Numbering and Marking System

Part Numbering System



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.

NOTE : Specification subject to change without notice.