

Application:	Low voltage USB equipment
Product Features:	Low resistance, Fast trip time , Lower Trip-to-hold Ratio
Operation Current:	750mA ~2.5A
Maximum Voltage:	16V (*can withstand voltage up to 30V)
Temperature Range:	-40°C to 85°C
Agency Recognition:	UL, C-UL, TÜV

### 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 5xIH				RMIN	R1MAX
								ohms	ohms
USB075-16	0.75	1.3	0.4	--	40	16	0.3	0.08	0.23
USB090-16*	0.90	1.8	1.2	5.9	40	16*	0.6	0.07	0.18
USB110-16*	1.10	2.2	2.3	6.6	40	16*	0.7	0.05	0.14
USB120-16	1.20	2.0	0.5	--	40	16	0.6	0.04	0.14
USB135-16*	1.35	2.7	4.5	7.3	40	16*	0.8	0.04	0.12
USB155-16	1.55	2.7	0.6	--	40	16	0.7	0.03	0.12
USB160-16*	1.60	3.2	9.0	8.0	40	16*	0.9	0.03	0.11
USB185-16*	1.85	3.7	10.0	8.7	40	16*	1.0	0.03	0.09
USB250-16*	2.50	5.0	40.0	10.3	40	16*	1.2	0.02	0.07

\* can withstand voltage up to 30V

IH=Hold current-maximum current at which the device will not trip at 23°C still air.

IT=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).

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

RMIN=Minimum device resistance at 23°C.

R1MAX=Maximum device resistance at 23°C, 1 hour after tripping .

Physical specifications:

Lead material: Tin plated copper, 24 AW

Soldering characteristics: Soldering ability per ANSI/J-STD 002

Solder heat withstand per IEC 68-2-20

USB 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.

## USB Product Dimensions (Millimeters)

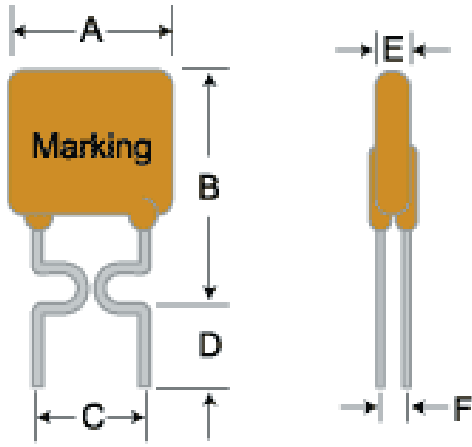


Figure 1  
Lead Size: 24AWG,  
Ø 0.51 mm Diameter

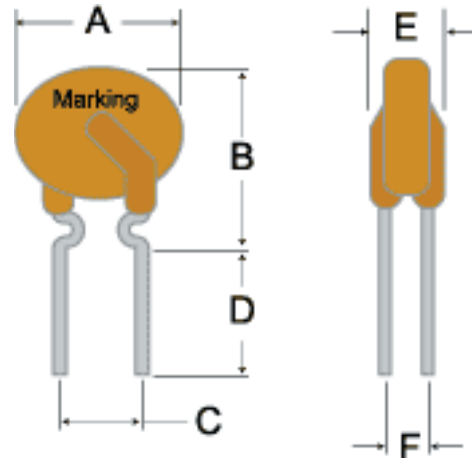
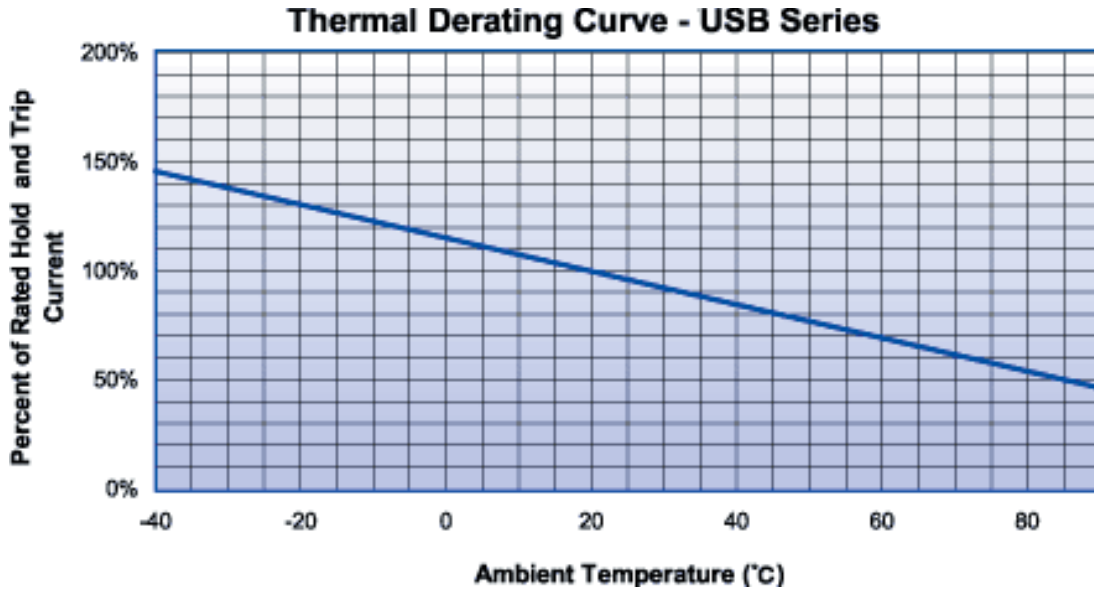


Figure 2  
Lead Size : 24AWG,  
Ø 0.81 mm Diameter

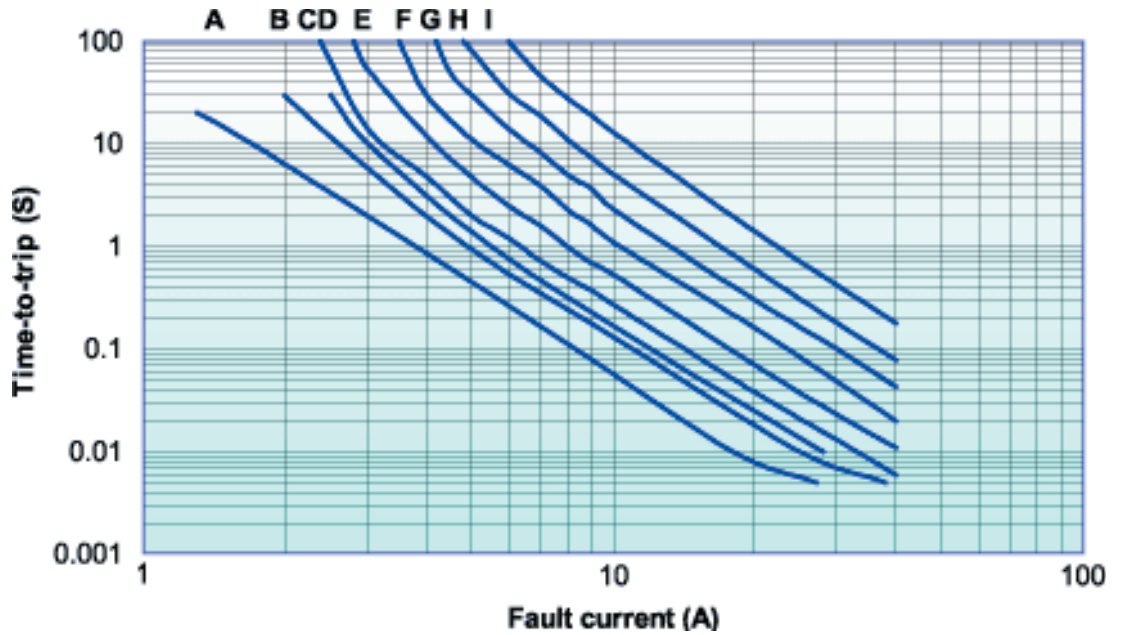
Part Number	FIG	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
USB075-16	2	6.9	11.4	5.1	7.6	3	0.8
USB090-16*	1	7.4	12.2	5.1	7.6	3	0.8
USB110-16*	1	7.4	14.2	5.1	7.6	3	0.8
USB120-16	2	6.9	11.7	5.1	7.6	3	0.8
USB135-16*	1	8.9	13.5	5.1	7.6	3	0.8
USB155-16	2	6.9	11.7	5.1	7.6	3	0.8
USB160-16*	1	8.9	15.2	5.1	7.6	3	0.8
USB185-16*	1	10.2	15.7	5.1	7.6	3	0.8
USB250-16*	1	11.4	18.3	5.1	7.6	3	0.8

## Thermal Derating Curve

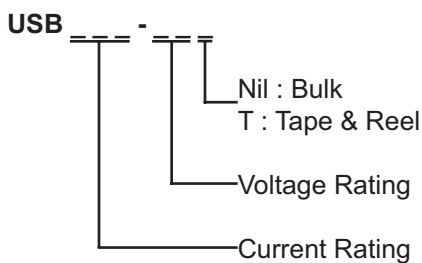


## Typical Time-To-Trip at 23°C

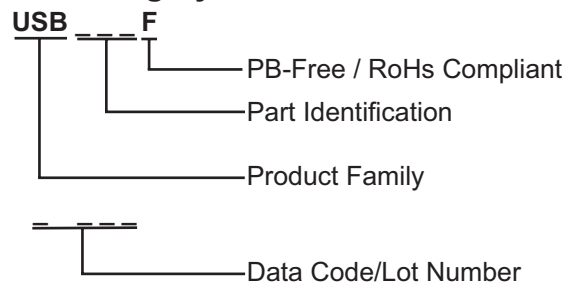
- A = USB075-16
- B = USB120-16\*
- C = USB155-16\*
- D = USB090-16
- E = USB110-16\*
- F = USB135-16
- G = USB160-16\*
- H = USB185-16\*
- I = USB250-16\*



## Part Numbering System



## Part Marking System





# USB Series

Radial Leaded PTC

## Standard Package

P/N	Pcs /Bag	Reel/Tape
USB075-16	500	3K
USB090-16*	500	3K
USB110-16*	500	3K
USB120-16	500	3K
USB135-16*	500	3K
USB155-16	500	3k
USB160-16*	500	3k
USB185-16*	500	3k
USB250-16*	500	3k

- 1- Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
- 2 -PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
- 3- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.