

Radial Leaded PTC FUSB Series



FUZETEC



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/30V

Temperature Range: -40°C to 85°C

Agency Approvals: UL(E211981),
C-UL(E211981),
TUV (R3-50004084)

Electrical characteristics(23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip		Maximum Current	Rated Voltage	Typical Power	Resistance Tolerance	
								R _{MIN}	R _{1MAX}
	I _H ,A	I _T ,A	at 8A	at 5xI _H	I _{MAX} ,A	V _{MAX} ,V _{dc}	P _d , W	Ω	Ω
FUSB075	0.75	1.30	0.4	--	40	16/30	0.3	0.080	0.23
FUSB090	0.90	1.80	1.2	5.9	40	16/30	0.6	0.070	0.18
FUSB110	1.10	2.20	2.3	6.6	40	16/30	0.7	0.050	0.14
FUSB120	1.20	2.00	0.5	--	40	16/30	0.6	0.040	0.14
FUSB135	1.35	2.70	4.5	7.3	40	16/30	0.8	0.040	0.12
FUSB155	1.55	2.70	0.6	--	40	16/30	0.7	0.030	0.12
FUSB160	1.60	3.20	9.0	8.0	40	16/30	0.9	0.030	0.11
FUSB185	1.85	3.70	10.0	8.7	40	16/30	1.0	0.030	0.09
FUSB250	2.50	5.00	40.0	10.3	40	16/30	1.2	0.020	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 the 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: Soldering 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-O requirement.

FUSB Product Dimensions (millimeters)

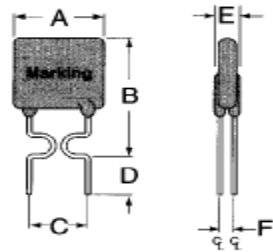


Figure 1

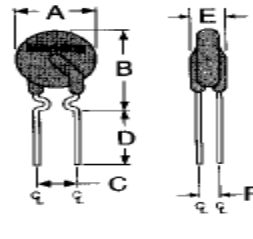


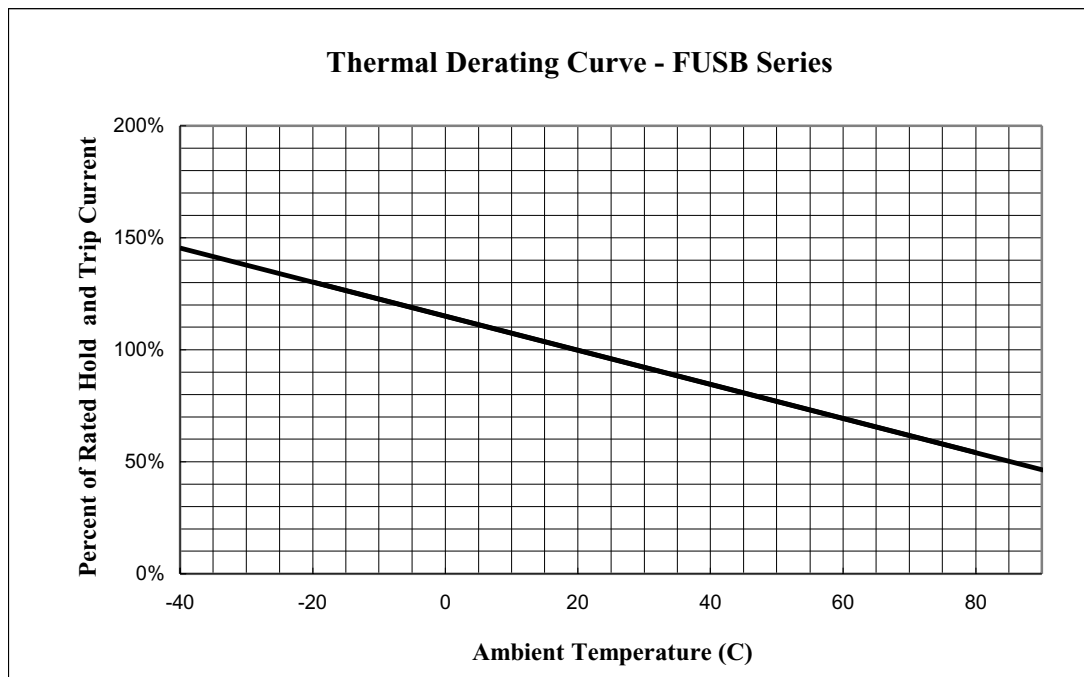
Figure 2

Lead Size :24AWG,
Φ 0.51 mm Diameter

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

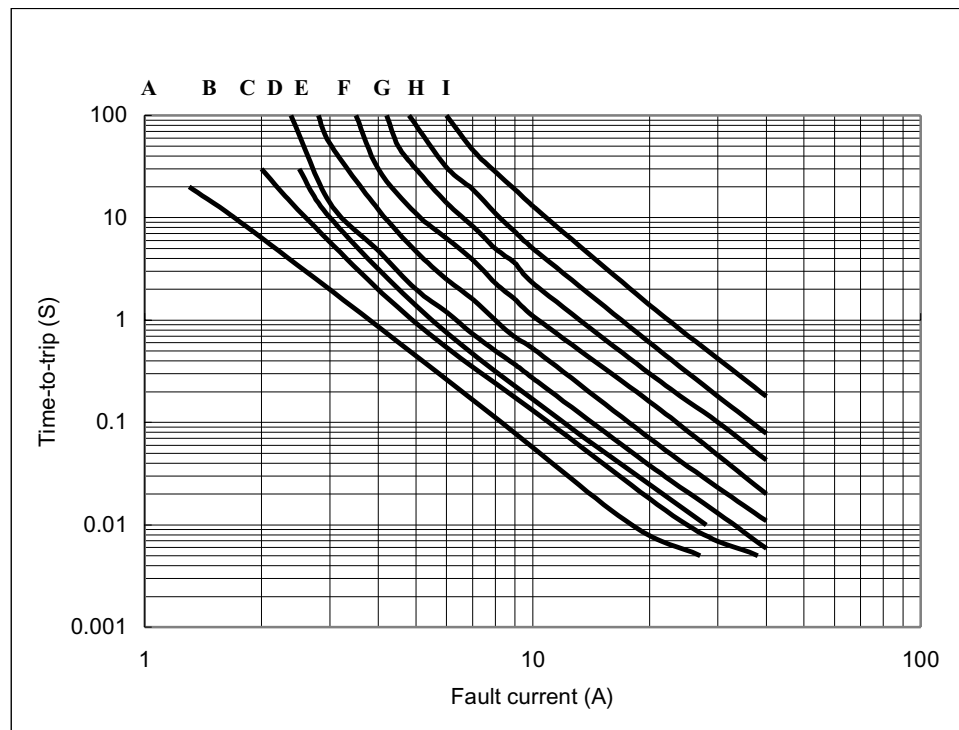
Thermal Derating Curve





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

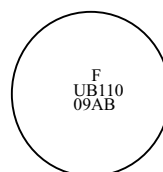


Part numbering system

F U S B □ □ □



Current rating



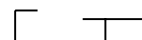
Example

Part marking system

F ————— Fuzetec Logo

UB □ □ □

Part Identification



Product Family

□ □ □ □

Date Code/Lot Number

Standard Package

P/N	Pcs /Bag	Reel/Tape
FUSB075	500	3K
FUSB090	500	3K
FUSB110	500	3K
FUSB120	500	3K
FUSB135	500	3K

P/N	Pcs /Bag	Reel/Tape
FUSB155	500	3K
FUSB160	500	3K
FUSB185	500	3K
FUSB250	500	3K