

T10B *SIDACtor*® Device



The bi-directional T10B devices are a through-hole technology *SIDACtor* protector. It is intended for cost-sensitive telecommunication applications.

This T10 *SIDACtor* series enables equipment to comply with various regulatory requirements including GR 1089, ITU K.20, K.21, and K.45, IEC 60950, UL 60950, and TIA-968-A (formerly known as FCC Part 68).

SIDACtor Devices

Electrical Parameters

Part Number *	V _{DRM} @ 5 μ A Volts	V _S Volts	V _T Volts	I _S mAmps	I _H mAmps	pF TYP
T10B080B	80	120	4	800	120	60
T10B080E	80	120	4	800	180	60
T10B110B	105	135	4	800	120	55
T10B110E	105	135	4	800	180	55
T10B140B	140	170	4	800	120	48
T10B140E	140	170	4	800	180	48
T10B180B	175	210	4	800	120	44
T10B180E	175	210	4	800	180	44
T10B220B	214	265	4	800	120	41
T10B220E	214	265	4	800	180	41
T10B270B	270	360	4	800	120	36
T10B270E	270	360	4	800	180	36

* For surge ratings, see table below.

General Notes:

- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- I_{PP} is a repetitive surge rating and is guaranteed for the life of the product.
- Listed *SIDACtor* devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V_{DRM} is measured at I_{DRM}.
- V_S is measured at 0.5 V/ μ s.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.

Surge Ratings in Amps

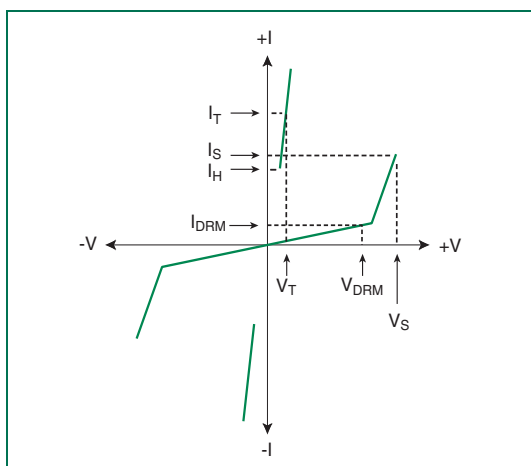
Series	I _{PP}			I _{TSM} 50 / 60 Hz Amps	di/dt Amps/ μ s
	8x20 * 1.2x50 **	5x310 * 10x700 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps		
B	250	125	100	50	100

* Current waveform in μ s

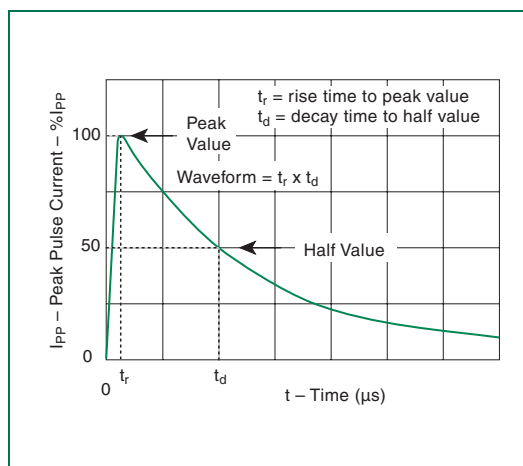
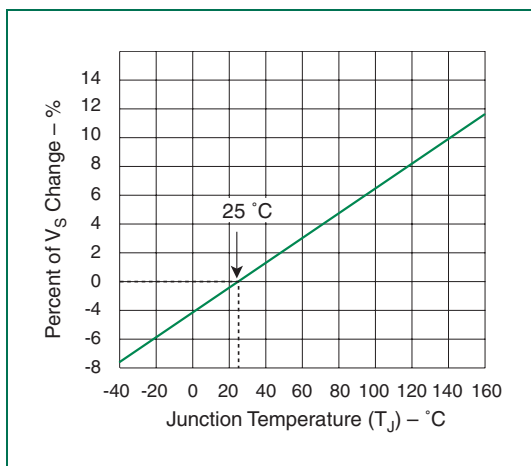
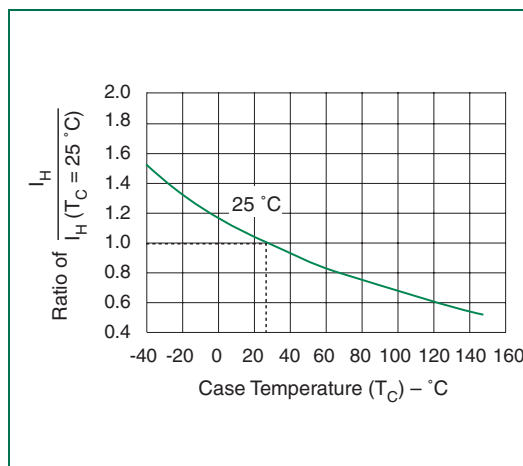
** Voltage waveform in μ s

Thermal Considerations

Package	Symbol	Parameter	Value	Unit
 DO-201AD	T_J	Operating Junction Temperature Range	150	°C
	T_S	Storage Temperature Range	-40 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	60	°C/W



V-I Characteristics


 $t_r \times t_d$ Pulse Waveform

Normalized V_S Change versus Junction Temperature


Normalized DC Holding Current versus Case Temperature