

## T10B *SIDACtor*<sup>®</sup> 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 <sub>DRM</sub> @ 5 $\mu$ A Volts	V <sub>S</sub> Volts	V <sub>T</sub> Volts	I <sub>S</sub> mAmps	I <sub>H</sub> 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<sub>PP</sub> applies to -40 °C through +85 °C temperature range.
- I<sub>PP</sub> 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<sub>DRM</sub> is measured at I<sub>DRM</sub>.
- V<sub>S</sub> is measured at 0.5 V/ $\mu$ s.
- Special voltage (V<sub>S</sub> and V<sub>DRM</sub>) and holding current (I<sub>H</sub>) requirements are available upon request.

### Surge Ratings in Amps

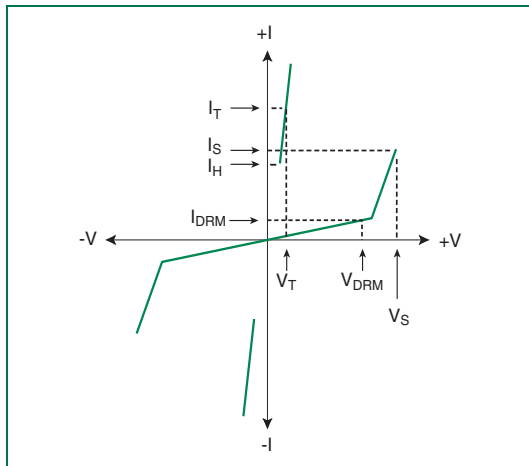
Series	I <sub>PP</sub>			I <sub>TSM</sub> 50 / 60 Hz	di/dt
	8x20 * 1.2x50 **	5x310 * 10x700 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps	Amps	Amps/ $\mu$ s
B	250	125	100	50	100

\* Current waveform in  $\mu$ s

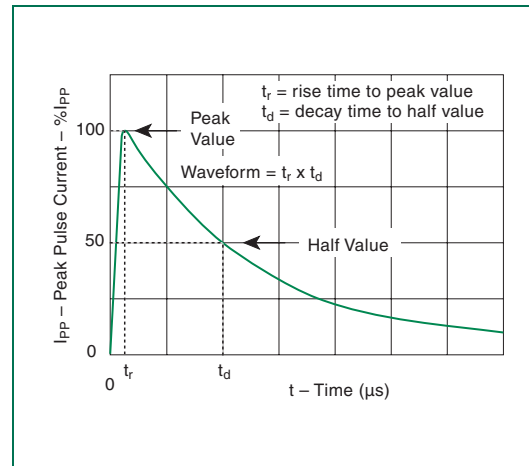
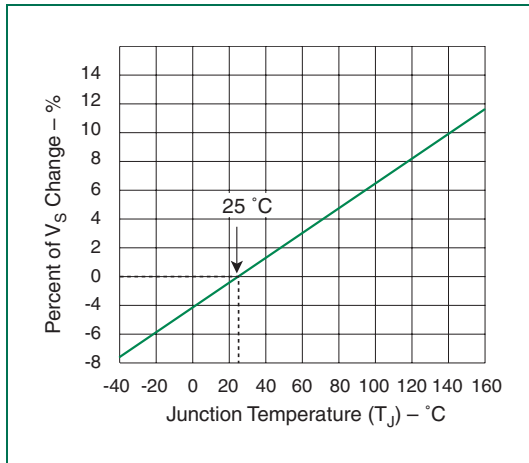
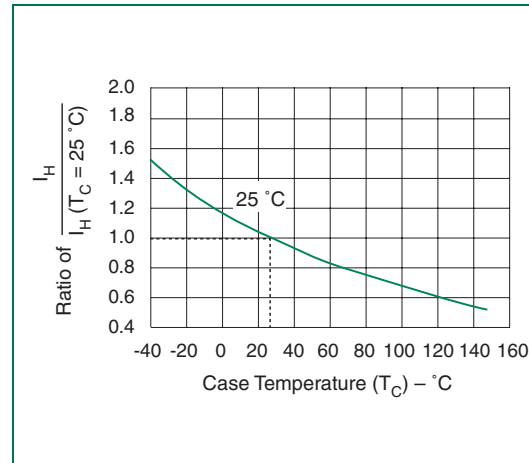
\*\* Voltage waveform in  $\mu$ s

## 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