

## T10A SIDACtor® Device

**RoHS**

 **Littelfuse®**



The bi-directional T10A 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 μA Volts	V <sub>S</sub> Volts	V <sub>T</sub> Volts	I <sub>S</sub> mAmps	I <sub>H</sub> mAmps	pF TYP
T10A060B	58	80	4	800	120	50
T10A060E	58	80	4	800	180	50
T10A062	60	82	4	800	150	50
T10A068	65	90	4	800	150	50
T10A080B	75	120	4	800	120	43
T10A080E	75	120	4	800	180	43
T10A100	100	133	4	800	150	43
T10A110B	110	135	4	800	120	38
T10A110E	110	135	4	800	180	38
T10A120	120	160	4	800	150	38
T10A130	130	173	4	800	150	38
T10A140B	140	170	4	800	120	34
T10A140E	140	170	4	800	180	34
T10A180	180	240	4	800	150	34
T10A180B	175	210	4	800	120	32
T10A180E	175	210	4	800	180	32
T10A200	200	267	4	800	150	30
T10A220	220	293	4	800	150	30
T10A220B	215	265	4	800	120	30
T10A220E	215	265	4	800	180	30
T10A240	240	320	4	800	150	30
T10A270	270	360	4	800	150	30
T10A270B	270	360	4	800	120	30
T10A270E	270	360	4	800	180	30

\* 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/μs.
- 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

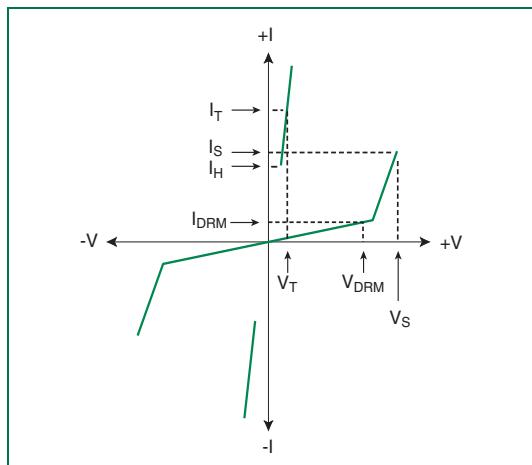
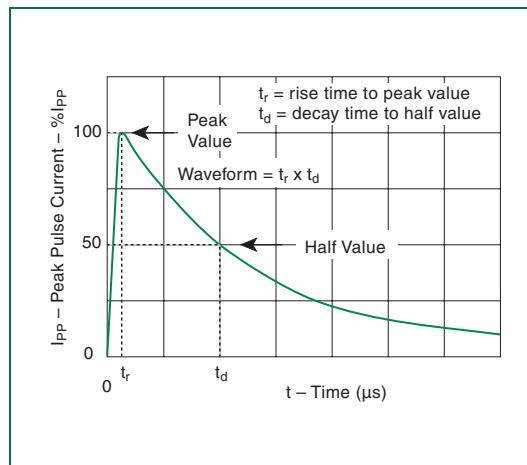
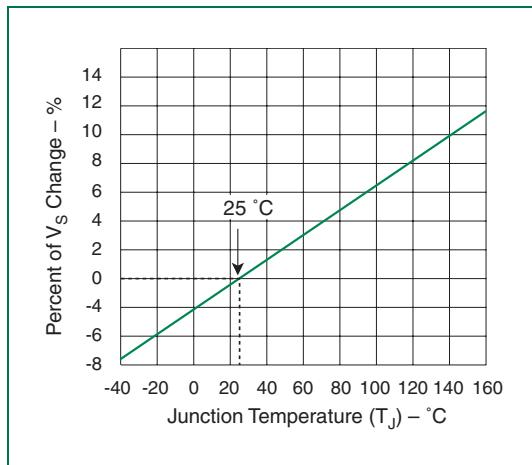
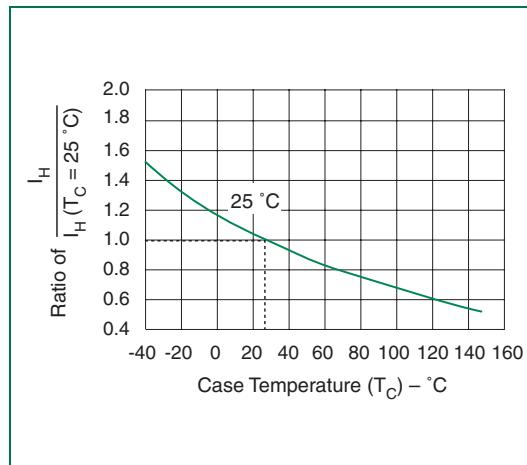
Series	I <sub>PP</sub>			I <sub>TSM</sub> 50 / 60 Hz	di/dt
	8x20 * 1.2x50 **	5x310 * 10x700 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps		
A	100	37.5	50	30	100

\* Current waveform in μs

\*\* Voltage waveform in μs

**Thermal Considerations**

Package	Symbol	Parameter	Value	Unit
DO-15	$T_J$	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**