

T10A *SIDACtor*® Device



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 _{DRM} @ 5 μ A Volts	V _S Volts	V _T Volts	I _S mAmps	I _H 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_{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

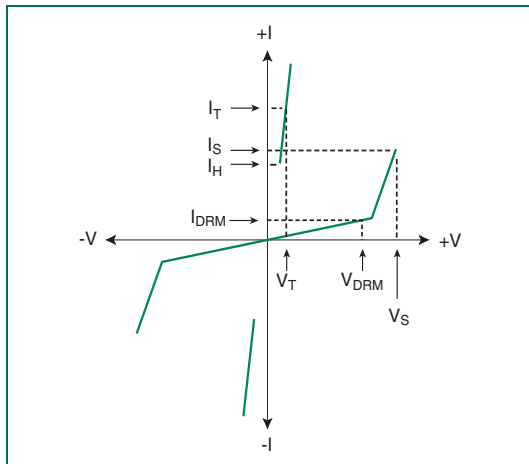
Series	I _{PP}			I _{TSM} 50 / 60 Hz Amps	di/dt Amps/ μ s
	8x20 * 1.2x50 **	5x310 * 10x700 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps		
A	100	37.5	50	30	100

* Current waveform in μ s

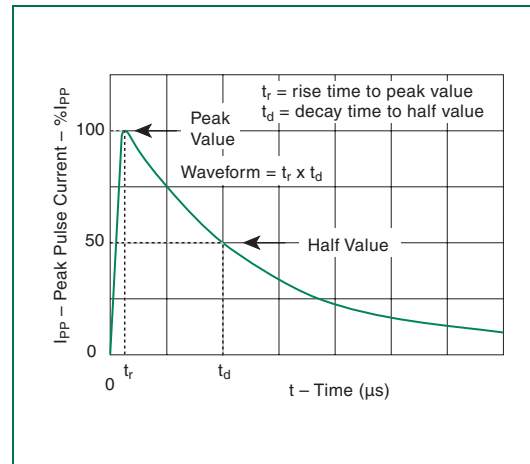
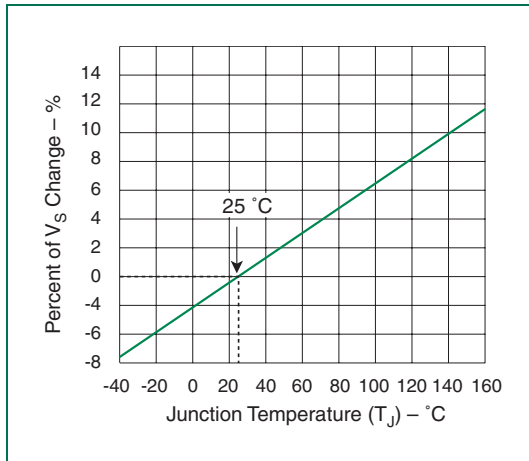
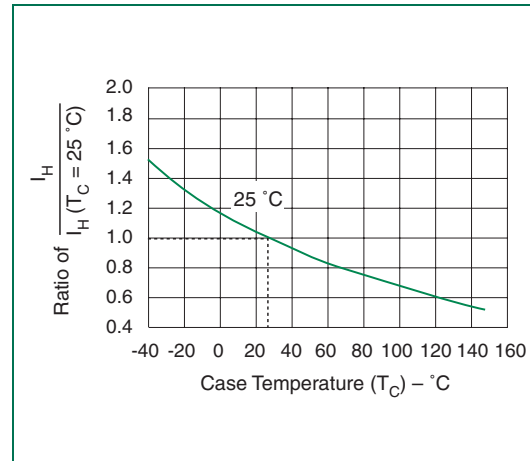
** Voltage waveform in μ s

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