



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

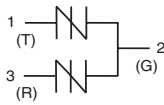
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## T10C *SIDACtor*<sup>®</sup> Device



The bi-directional T10C devices are a through-hole technology *SIDACtor* protector. It is intended for cost-sensitive telecommunication applications. The three-terminal configuration matches G.D.T. pin configuration; for plug-in applications, the T10C fits in the KRONE™ three-point connector block (5B).

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).

For primary protection applications, integrated failsafe options are available.

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 Pin 1-2 / 3-2 Tip-Ground, Ring-Ground TYP	pF Pin 1-3 Tip-Ring TYP
T10C080B	80	120	4	800	120	110	61
T10C080E	80	120	4	800	180	110	61
T10C110B	105	135	4	800	120	90	51
T10C110E	105	135	4	800	180	90	51
T10C140B	140	170	4	800	120	83	48
T10C140E	140	170	4	800	180	83	48
T10C180B	175	210	4	800	120	77	44
T10C180E	175	210	4	800	180	77	44
T10C220B	214	265	4	800	120	74	42
T10C220E	214	265	4	800	180	74	42
T10C270B	270	360	4	800	120	68	38
T10C270E	270	360	4	800	180	68	38

\* For failsafe option, add "F" at end of part number. See Section 9, "Mechanical Data" for mechanical view of failsafe option. 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> across Pins 1-2 / 3-2.
- V<sub>S</sub> is measured at 0.5 V/μs across Pins 1-2 / 3-2.
- Special voltage (V<sub>S</sub> and V<sub>DRM</sub>) and holding current (I<sub>H</sub>) requirements are available upon request.

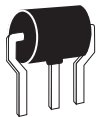
### Surge Ratings in Amps

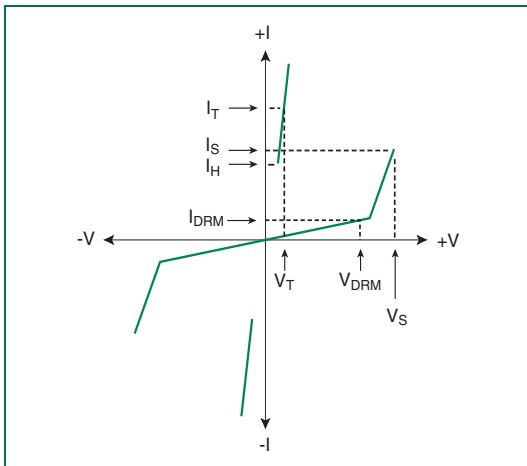
Series	I <sub>PP</sub>			I <sub>TSM</sub> 50 / 60 Hz Amps	di/dt Amps/μs
	8x20 * 1.2x50 **	5x310 * 10x700 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps	Amps	Amps/μs
C	250	125	100	50	100

\* Current waveform in μs

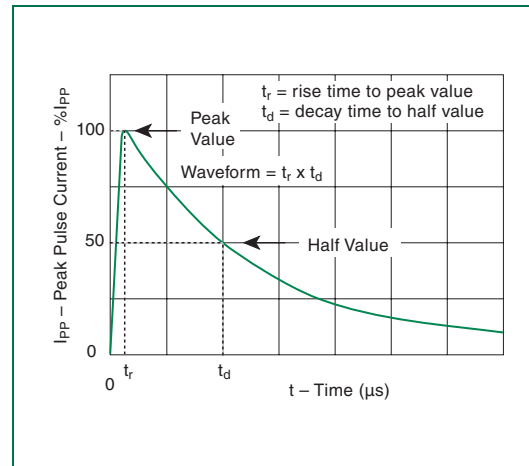
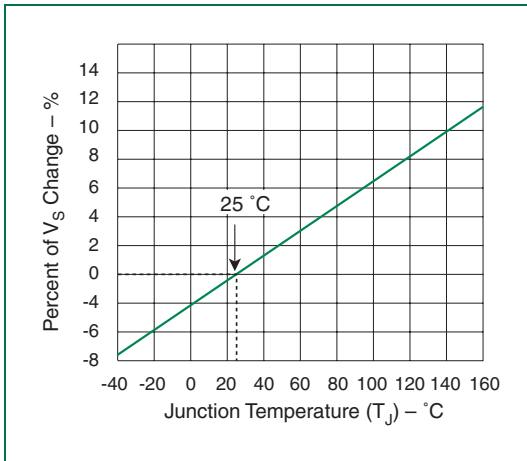
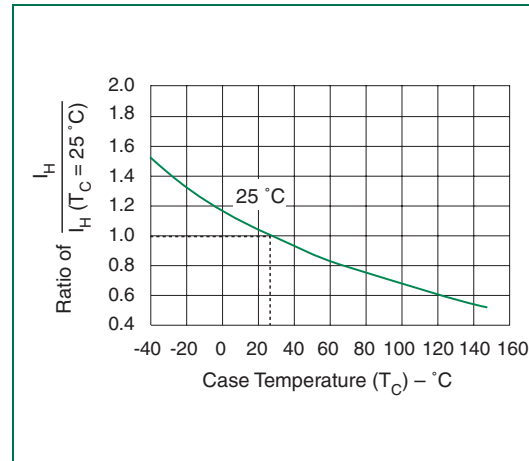
\*\* Voltage waveform in μs

## Thermal Considerations

Package	Symbol	Parameter	Value	Unit
 [T10C]	$T_J$	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