



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

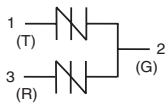
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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

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



High Surge Current Three-pin *SIDACtor*® Device



This *SIDACtor* device is a 1000 A solid state protection device offered in a TO-220 package. It protects equipment located in the severe surge environment of CATV (Community Antenna TV) systems and antenna locations.

Electrical Parameters

Part Number *	V _{DRM} Volts	V _S Volts	V _T Volts	I _{DRM} μAmps	I _S mAmps	I _T Amps	I _H mAmps
P6002ADL	550	700	5.5	5	800	2.2	50

* "L" in part number indicates RoHS compliance. For non-RoHS compliant device, delete "L" from part number. For surge ratings, see table below.



Electrical Parameters

Part Number *	V _{DRM} Volts	V _S Volts	V _T Volts	I _{DRM} μAmps	I _S mAmps	I _T Amps	I _H mAmps
P3100ADL	280	360	5.5	5	800	2.2	150

* "L" in part number indicates RoHS compliance. For non-RoHS compliant device, delete "L" from part number. 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 100 V/μs.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.

Surge Ratings in Amps

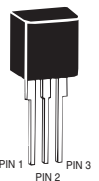
Series	I _{PP}		I _{TSM} 50 / 60 Hz	di/dt
	8x20 * 1.2x50 **	10x1000 * 10x1000 **		
	Amps	Amps	Amps	Amps/μs
D	1000	250	120	500

* Current waveform in μs

** Voltage waveform in μs

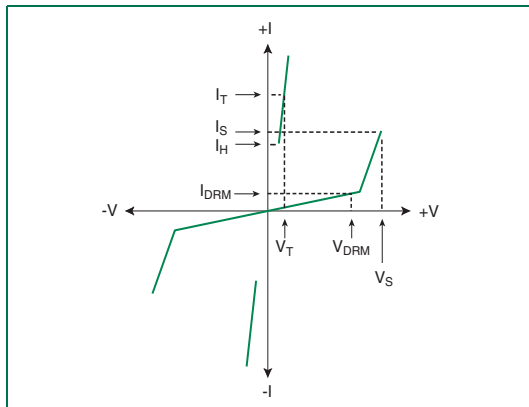
Note: P6002AD is shown. P3100AD has no center lead.

Thermal Considerations

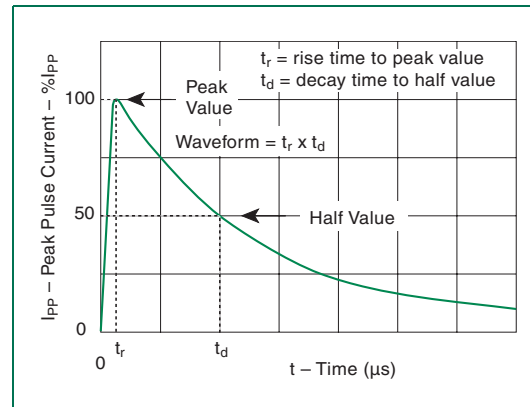
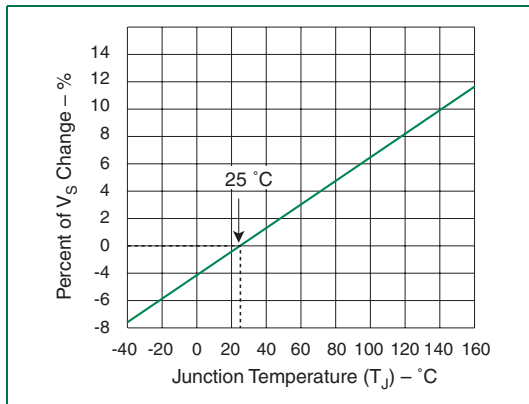
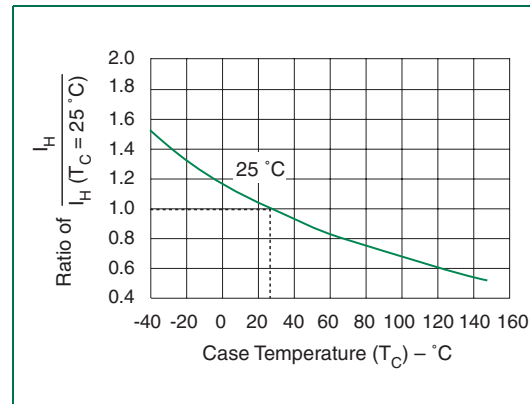
Package	Symbol	Parameter	Value	Unit
Modified TO-220 	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	60	°C/W

Capacitance Values

Part Number	pF	
	MIN	MAX
P6002ADL	60	200
P3100ADL	100	150

 Note: Off-state capacitance (C_0) is measured at 1 MHz with a 2 V bias.


V-I Characteristics


 $t_r \times t_d$ Pulse Waveform

 Normalized V_S Change versus Junction Temperature


Normalized DC Holding Current versus Case Temperature