

SIDACtor Device



The modified TO-220 Type 61 *SIDACtor* solid state protection device can be used in telecommunication protection applications that do not reference earth ground.

SIDACtor devices are used to enable equipment to meet 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).

Electrical Parameters

Part Number *	V _{DRM} Volts	V _S Volts	V _T Volts	I _{DRM} μ Amps	I _S mAmps	I _T Amps	I _H mAmps	C _O pF
P2000AA61	180	220	4	5	800	2.2	150	30
P2200AA61	200	240	4	5	800	2.2	150	30
P2400AA61	220	260	4	5	800	2.2	150	30
P2500AA61	240	290	4	5	800	2.2	150	30
P3000AA61	270	330	4	5	800	2.2	150	30
P3300AA61	300	360	4	5	800	2.2	150	30

* For surge ratings, see table below.

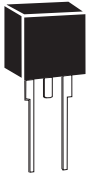
General Notes:

- 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 100 V/ μ s.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.
- Off-state capacitance (C_O) is measured at 1 MHz with a 2 V bias and is a typical value.

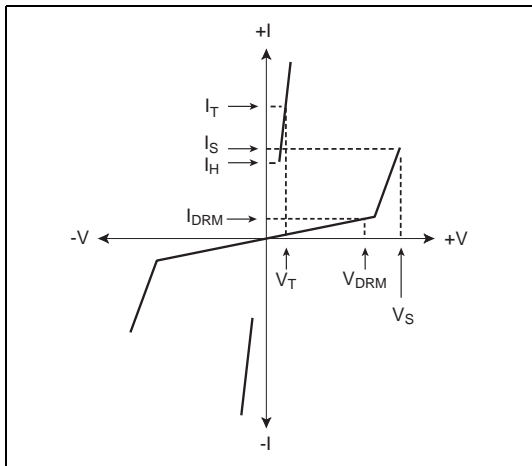
Surge Ratings

Series	I _{PP} 0.2x310 μ s Amps	I _{PP} 2x10 μ s Amps	I _{PP} 8x20 μ s Amps	I _{PP} 10x160 μ s Amps	I _{PP} 10x560 μ s Amps	I _{PP} 5x320 μ s Amps	I _{PP} 10x1000 μ s Amps	I _{TSM} 60 Hz Amps	di/dt Amps/ μ s
A	20	150	150	90	50	75	45	20	500

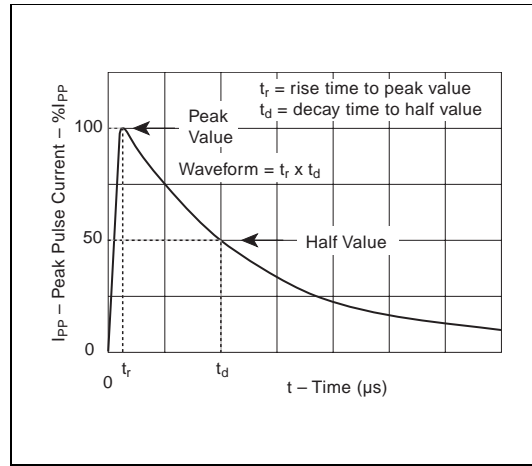
Thermal Considerations

Package	Symbol	Parameter	Value	Unit
Modified TO-220 Type 61 	T_J	Operating Junction Temperature Range	-40 to +150	$^{\circ}\text{C}$
	T_S	Storage Temperature Range	-65 to +150	$^{\circ}\text{C}$
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	50	$^{\circ}\text{C}/\text{W}$

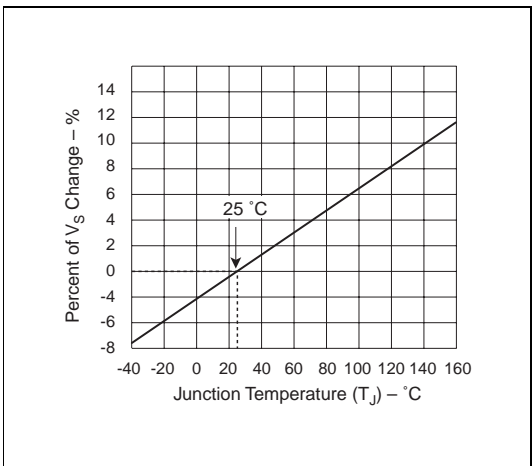
Data Sheets



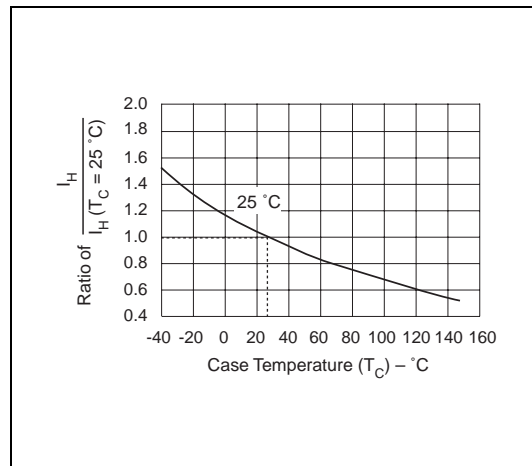
V-I Characteristics



$t_r \times t_d$ Pulse Wave-form



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Mouser Electronics

Authorized Distributor

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[P3300AA61RP](#) [P2000AA61RP](#)