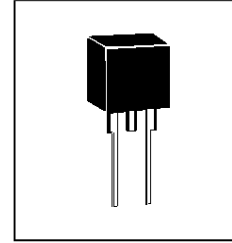


TO-220 Type 61 SIDACtor

The modified TO-220 Type 61 SIDACtor is a solid state protection device designed for telecommunications applications that do not reference earth ground.

The SIDACtor is used to help equipment meet various regulatory requirements including: GR 1089, ITU K.20 & K.21, IEC 950, UL 1459 & 1950 and FCC Part 68.



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	C _O pF
P2000AA61	180	220	5	5	800	1	150	30
P2200AA61	200	240	5	5	800	1	150	30
P2400AA61	220	260	5	5	800	1	150	30
P2500AA61	240	290	5	5	800	1	150	30
P3000AA61	270	330	5	5	800	1	150	30
P3300AA61	300	360	5	5	800	1	150	30

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 SIDACtors are bi-directional. All electrical parameters & surge ratings apply to forward and reverse polarities.
- V_{DRM} is measured at I_{DRM}.
- V_S is measured at 100V/μs.
- Special voltage (V_S & V_{DRM}) and holding current (I_H) requirements are available upon request.
- Off-state capacitance is measured at 1MHz with a 2 volt bias and is a typical value.

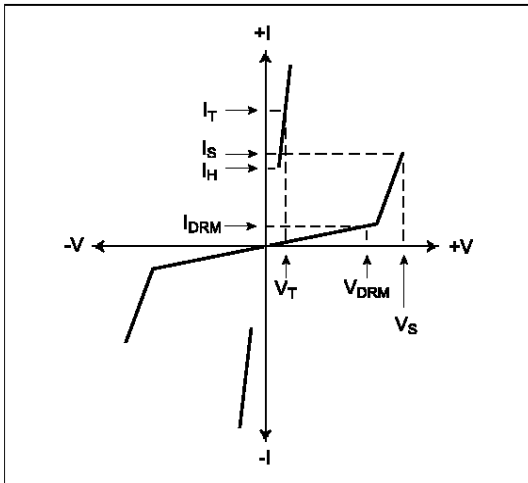
Surge Ratings

Series	I _{PP} 0.2x310μs Amps	I _{PP} 2x10μs Amps	I _{PP} 8x20μs Amps	I _{PP} 10x160μs Amps	I _{PP} 10x560μs Amps	I _{PP} 5x320μs Amps	I _{PP} 10x1000μs Amps	I _{TSM} 60Hz Amps	di/dt Amps/μs
AA	20	200	150	100	50	75	50	20	500

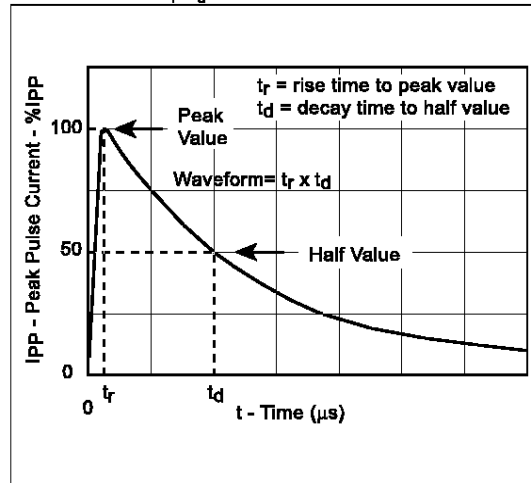
Thermal Considerations

Package	Symbol	Parameter	Value	Unit
Modified TO-220	T_j	Junction Temperature Range	-40 to +150	°C
	T_s	Storage Temperature Range	-65 to +150	°C
	T_c	Maximum Case Temperature	+115	°C
	$R_{\theta jc}$	Thermal Resistance: junction to case	+12	°C/W
	$R_{\theta ja}$	Thermal Resistance: junction to ambient	+50	°C/W

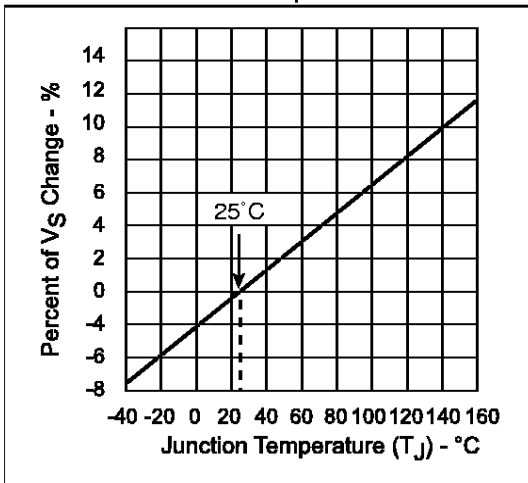
V-I Characteristics



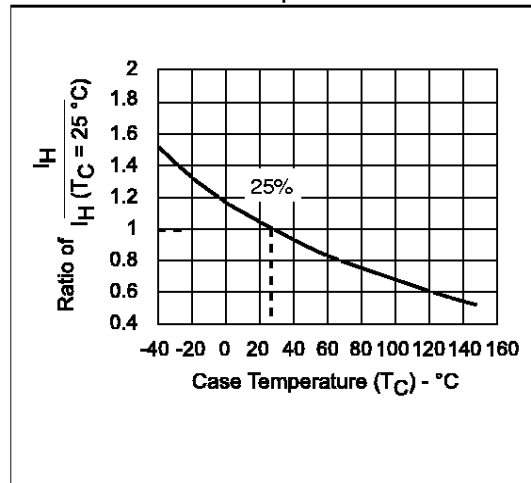
t_r, t_d Pulse Wave-form



Normalized V_S Change vs. Junction Temperature



Normalized DC Holding Current vs. Case Temperature



Data Sheets