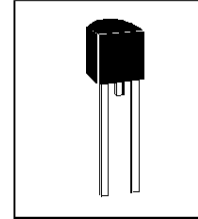


TO-92 SIDACtor

The TO-92 SIDACtor is a solid state protection device designed for telecommunications applications such as modems, line cards, fax machines, etc.

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
P0080E_	6	25	5	5	800	1	50	100
P0300E_	25	40	5	5	800	1	50	110
P0640E_	58	77	5	5	800	1	150	50
P0720E_	65	88	5	5	800	1	150	50
P0900E_	75	98	5	5	800	1	150	50
P1100E_	90	130	5	5	800	1	150	40
P1300E_	120	160	5	5	800	1	150	40
P1500E_	140	180	5	5	800	1	150	40
P1800E_	160	220	5	5	800	1	150	30
P2300E_	190	260	5	5	800	1	150	30
P2600E_	220	300	5	5	800	1	150	30
P3100E_	275	350	5	5	800	1	150	30
P3500E_	320	400	5	5	800	1	150	30

* For individual "EA", "EB" and "EC" surge ratings, see table below.

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 for "EA" and "EB" product. "EC" capacitance is approximately 2x the listed value.

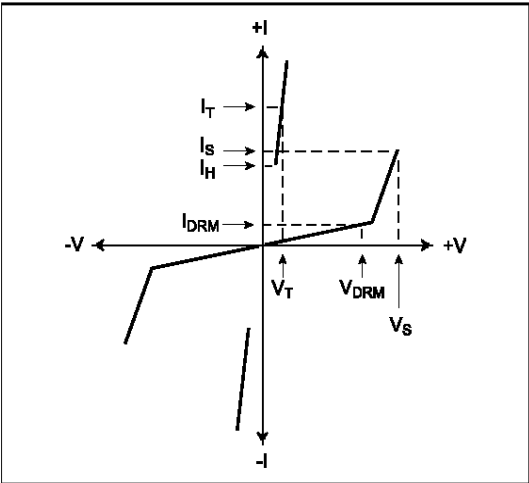
Surge Ratings

Series	I _{PP} 2x10μs Amps	I _{PP} 8x20μs Amps	I _{PP} 10x160μs Amps	I _{PP} 10x560μs Amps	I _{PP} 10x1000μs Amps	I _{TSM} 60Hz Amps	di/dt Amps/μs
A		150	100	50		20	500
B		250	150	100		30	500
C	500	400	200		100	60	500

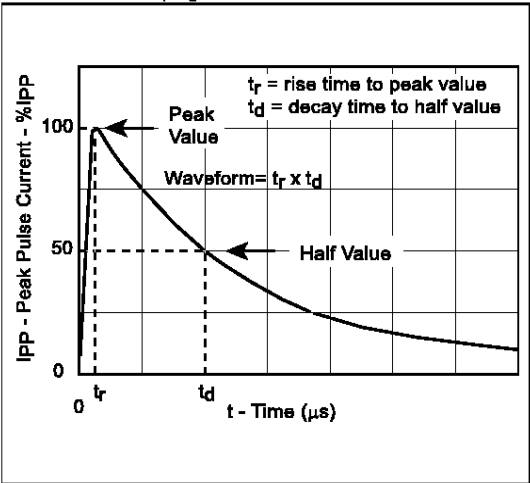
Thermal Considerations

Package	Symbol	Parameter	Value	Unit
TO-92	T_j	Junction Temperature Range	-40 to +150	°C
	T_s	Storage Temperature Range	-65 to +150	°C
	T_c	Maximum Case Temperature	+110	°C
	$R_{\theta jc}$	Thermal Resistance: junction to case	+28	°C/W
	$R_{\theta ja}$	Thermal Resistance: junction to ambient	+90	°C/W

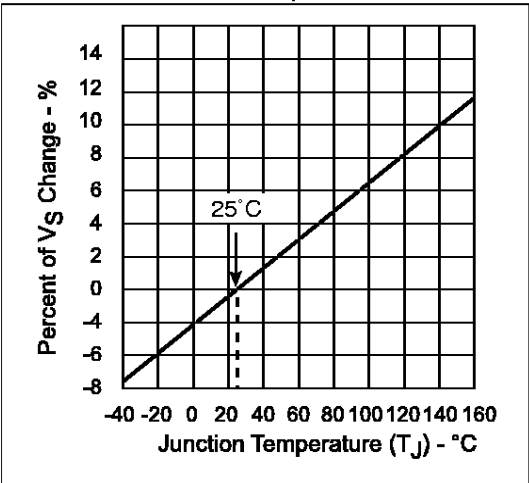
V-I Characteristics



t_r, t_d Pulse Wave-form



Normalized V_S Change vs. Junction Temperature



Normalized DC Holding Current vs. Case Temperature

