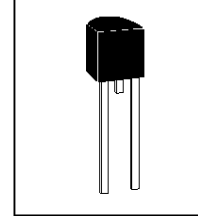


## TO-92 SIDACtor

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 <sub>DRM</sub> Volts	V <sub>S</sub> Volts	V <sub>T</sub> Volts	I <sub>DRM</sub> μAmps	I <sub>S</sub> mAmps	I <sub>T</sub> Amps	I <sub>H</sub> mAmps	C <sub>O</sub> 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. (P0080EB is not available.)

#### 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 SIDACtors are bi-directional. All electrical parameters & surge ratings apply to forward and reverse polarities.
- V<sub>DRM</sub> is measured at I<sub>DRM</sub>.
- V<sub>S</sub> is measured at 100V/μs.
- Special voltage (V<sub>S</sub> & V<sub>DRM</sub>) and holding current (I<sub>H</sub>) 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

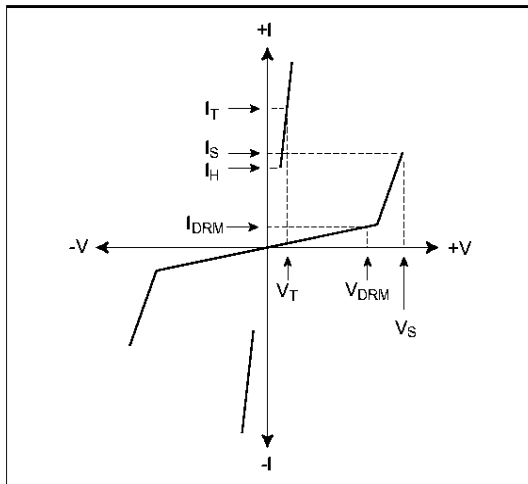
Series	I <sub>PP</sub> 2x10μs Amps	I <sub>PP</sub> 8x20μs Amps	I <sub>PP</sub> 10x160μs Amps	I <sub>PP</sub> 10x560μs Amps	I <sub>PP</sub> 10x1000μs Amps	I <sub>TSM</sub> 60Hz Amps	dI/dt Amps/μs
A		150	100	50		20	500
B		250	150	100		30	500
C	500	400	200		100	60	500

**Thermal Considerations**

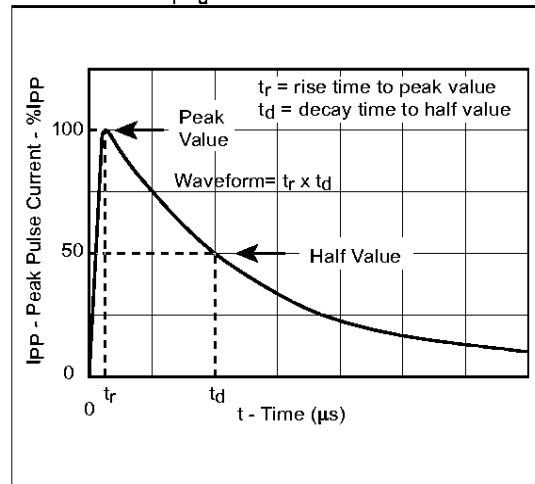
Package	Symbol	Parameter	Value	Unit
TO-92	$T_j$	Junction Temperature Range	-40 to +150	°C
	$T_s$	Storage Temperature Range	-65 to +150	°C
	$T_c$	Maximum Case Temperature	+110	°C
	$R_{\theta jc}$	Thermal Resistance: junction to case	+28	°C/W
	$R_{\theta ja}$	Thermal Resistance: junction to ambient	+90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

Data Sheets

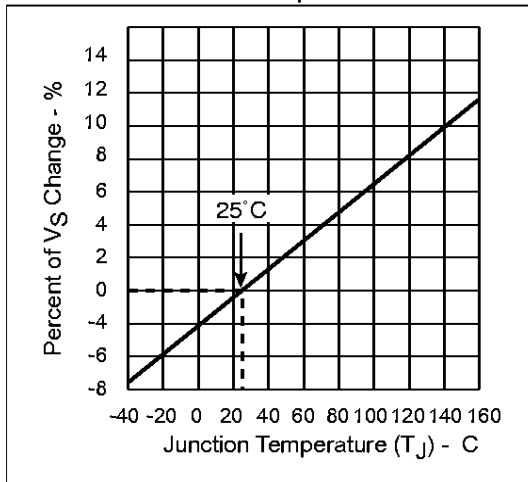
**V-I Characteristics**



**$t_r, t_d$  Pulse Wave-form**



**Normalized V<sub>S</sub> Change vs. Junction Temperature**



**Normalized DC Holding Current vs. Case Temperature**

