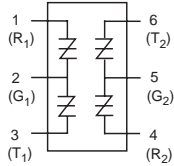


## Multiport SIDACtor Device



The multiport line protector is an integrated multichip solution for protecting multiple twisted pair from overvoltage conditions. Based on a six-pin surface mount SOIC package, it is equivalent to four discrete DO-214AA or two TO-220 packages. Available in surge current ratings up to 500 A, the multiport line protector is ideal for densely populated, high-speed line cards that cannot afford PCB inefficiencies or the use of series power resistors.

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 <sub>DRM</sub> Volts	V <sub>S</sub> Volts	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
	Pins 1-2, 3-2, 4-5, 6-5		Pins 1-3, 4-6							
P0084U_	6	25	12	50	4	5	800	2.2	50	100
P0304U_	25	40	50	80	4	5	800	2.2	50	110
P0644U_	58	77	116	154	4	5	800	2.2	150	50
P0724U_	65	88	130	176	4	5	800	2.2	150	50
P0904U_	75	98	150	196	4	5	800	2.2	150	50
P1104U_	90	130	180	260	4	5	800	2.2	150	40
P1304U_	120	160	240	320	4	5	800	2.2	150	40
P1504U_	140	180	280	360	4	5	800	2.2	150	40
P1804U_	170	220	340	440	4	5	800	2.2	150	30
P2304U_	190	260	380	520	4	5	800	2.2	150	30
P2604U_	220	300	440	600	4	5	800	2.2	150	30
P3104U_	275	350	550	700	4	5	800	2.2	150	30
P3504U_	320	400	640	800	4	5	800	2.2	150	30

\* For individual "UA", "UB", and "UC" surge ratings, see table below.

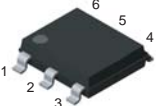
#### General Notes:

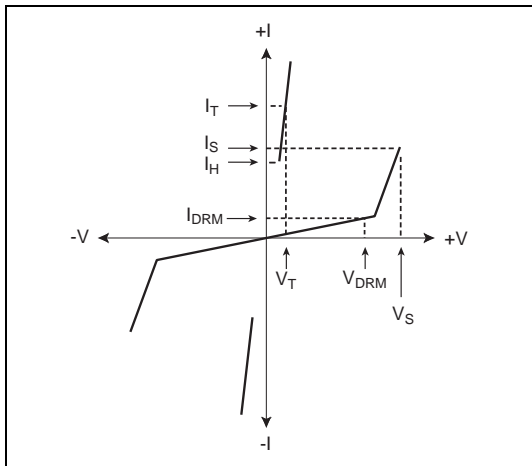
- All measurements are made at an ambient temperature of 25 °C. I<sub>PP</sub> applies to -40 °C through +85 °C temperature range.
- I<sub>PP</sub> is a repetitive surge rating and is guaranteed for the life of the product.
- Listed SIDACtor devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V<sub>DRM</sub> is measured at I<sub>DRM</sub>, and V<sub>S</sub> is measured at 100 V/μs.
- Off-state capacitance (C<sub>O</sub>) is measured between Pins 1-2 and 3-2 at 1 MHz with a 2 V bias and is a typical value for "UA" product. "UB" and "UC" capacitance is approximately 2x higher.

### Surge Ratings

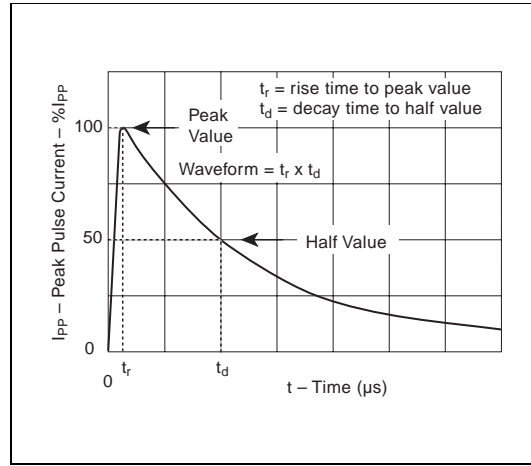
Series	I <sub>PP</sub> 2x10 μs Amps	I <sub>PP</sub> 8x20 μs Amps	I <sub>PP</sub> 10x160 μs Amps	I <sub>PP</sub> 10x560 μs Amps	I <sub>PP</sub> 10x1000 μs Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/μs
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

Thermal Considerations

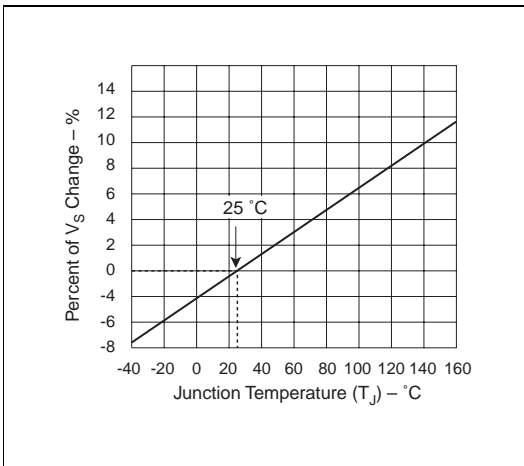
Package	Symbol	Parameter	Value	Unit
	$T_J$	Operating Junction Temperature Range	-40 to +150	$^{\circ}\text{C}$
	$T_S$	Storage Temperature Range	-65 to +150	$^{\circ}\text{C}$
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	60	$^{\circ}\text{C/W}$



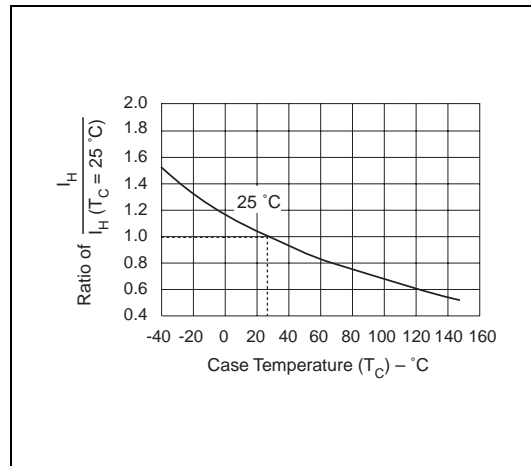
V-I Characteristics



$t_r \times t_d$  Pulse Wave-form



Normalized  $V_S$  Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Data Sheets