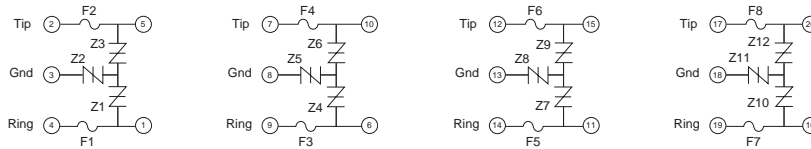


## Four-port Balanced Three-chip Protector

This hybrid Single In-line Package (SIP) protects four twisted pairs from overcurrent and overvoltage conditions. Comprised of twelve discrete DO-214AA *SIDACTor* devices and eight *TeleLink* surface mount fuses, it is ideal for densely populated line cards that cannot afford PCB inefficiencies or the use of series power resistors. Surge current ratings up to 500 A are available.



### 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 2-3, 4-3, 7-8, 9-8, 12-13, 14-13, 17-18, 19-18		Pins 2-4, 7-9, 12-14, 17-19							Pins 1-3
P1553Z_	130	180	130	180	8	5	800	2.2	150	40
P1803Z_	150	210	150	210	8	5	800	2.2	150	40
P2103Z_	170	250	170	250	8	5	800	2.2	150	40
P2353Z_	200	270	200	270	8	5	800	2.2	150	40
P2703Z_	230	300	230	300	8	5	800	2.2	150	30
P3203Z_	270	350	270	350	8	5	800	2.2	150	30
P3403Z_	300	400	300	400	8	5	800	2.2	150	30
A2106Z_3 **	170	250	50	80	8	5	800	2.2	120	40
A5030Z_3 **	400	550	270	340	8	5	800	2.2	150	30

\* For individual "ZA," "ZB," and "ZC" surge ratings, see table below.

\*\* Asymmetrical

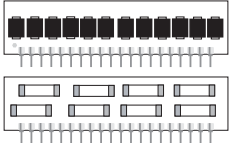
#### General Notes:

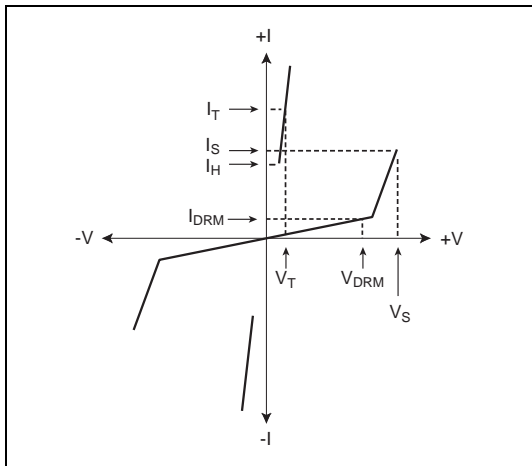
- All measurements are made at an ambient temperature of 25 °C. I<sub>PP</sub> applies to -40 °C through +85 °C temperature range.
- I<sub>PP</sub> is a repetitive surge rating and is guaranteed for the life of the product.
- Listed *SIDACTor* devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V<sub>DRM</sub> is measured at I<sub>DRM</sub>.
- V<sub>S</sub> is measured at 100 V/μs.
- Special voltage (V<sub>S</sub> and V<sub>DRM</sub>) and holding current (I<sub>H</sub>) requirements are available upon request.
- Off-state capacitance is measured between Pins 4-3 and Pins 2-3 at 1 MHz with a 2 V bias and is a typical value for "ZA" product. "ZB" and "ZC" capacitance is approximately 10 pF higher.
- Device is designed to meet balance requirements of GTS 8700 and GR 974.

### Surge Ratings

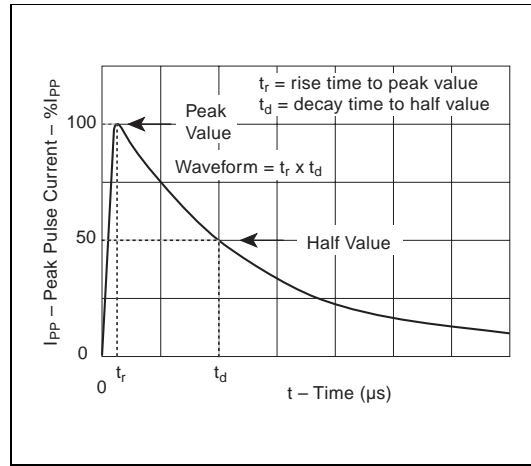
Series	I <sub>PP</sub> 2x10 μs Amps	I <sub>PP</sub> 8x20 μs Amps	I <sub>PP</sub> 10x160 μs Amps	I <sub>PP</sub> 10x560 μs Amps	I <sub>PP</sub> 10x1000 μs Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/μs
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

Thermal Considerations

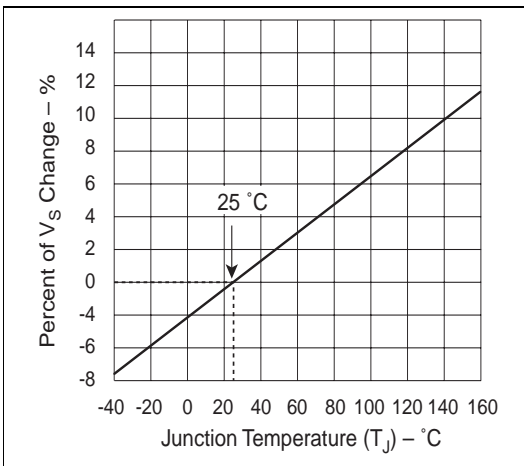
Package	Symbol	Parameter	Value	Unit
	$T_J$	Operating Junction Temperature Range	-40 to +150	$^{\circ}\text{C}$
	$T_S$	Storage Temperature Range	-65 to +150	$^{\circ}\text{C}$
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	$^{\circ}\text{C/W}$



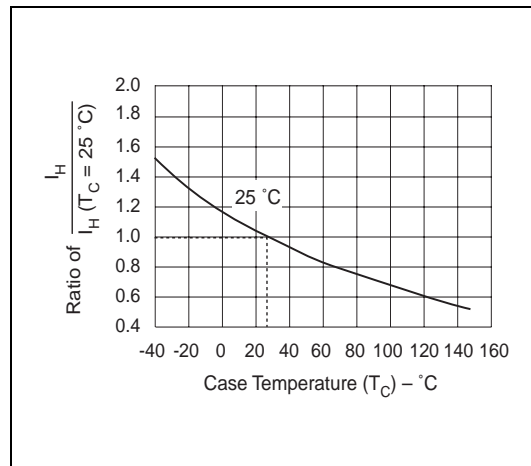
V-I Characteristics



$t_r \times t_d$  Pulse Waveform



Normalized  $V_S$  Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Data Sheets