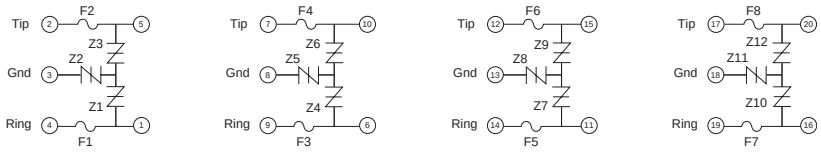
Four-port Balanced Three-chip Protector

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_{DRM} Volts	V_S Volts	V_{DRM} Volts	V_S Volts	V_T Volts	I_{DRM} µAmps	I_S mAmps	I_T Amps	I_H mAmps	C_O 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

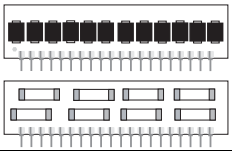
* For individual “ZA,” “ZB,” and “ZC” surge ratings, see table below.
** Asymmetrical

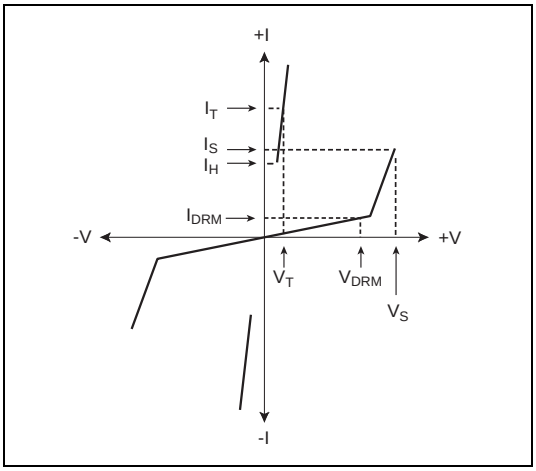
General Notes:
- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- I_{PP} is a repetitive surge rating and is guaranteed for the life of the product.
- Listed *SIDACtor* devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V_{DRM} is measured at I_{DRM}.
- V_S is measured at 100 V/µs.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) 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

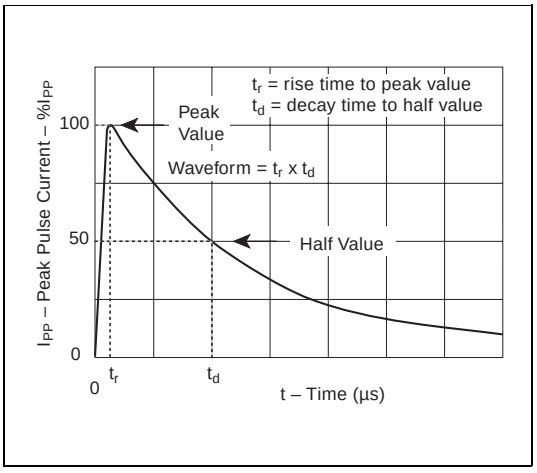
Series	I_{PP} 2x10 µs Amps	I_{PP} 8x20 µs Amps	I_{PP} 10x160 µs Amps	I_{PP} 10x560 µs Amps	I_{PP} 10x1000 µs Amps	I_{TSM} 60 Hz Amps	di/dt Amps/µs
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

Thermal Considerations

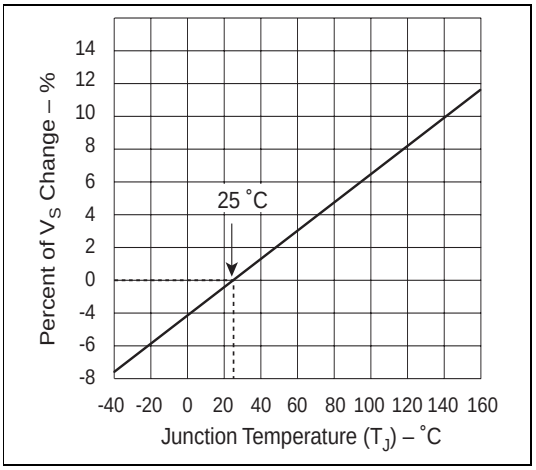
Package	Symbol	Parameter	Value	Unit
SIP 	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W



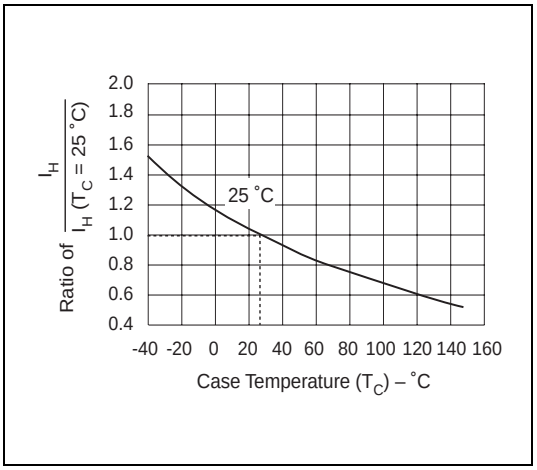
V-I Characteristics



t_r x t_d Pulse Waveform



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature