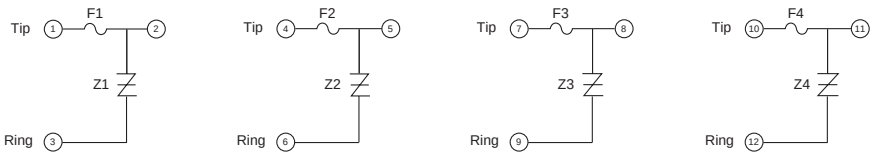
Four-port Metallic Line Protector

The four-port hybrid Single In-line Package (SIP) line protector protects multiple twisted pair from overcurrent and overvoltage conditions. Based on a SIP, it is equivalent to four discrete DO-214AA *SIDACtor* devices and four surface mount fuses. Available in surge current ratings up to 500 A, this four-port SIP line protector is ideal for densely populated line cards that cannot afford PCB inefficiencies or the use of series power resistors.



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
P0080Z_	6	25	4	5	800	2.2	50	100
P0300Z_	25	40	4	5	800	2.2	50	110
P0640Z_	58	77	4	5	800	2.2	150	50
P0720Z_	65	88	4	5	800	2.2	150	50
P0900Z_	75	98	4	5	800	2.2	150	50
P1100Z_	90	130	4	5	800	2.2	150	40
P1300Z_	120	160	4	5	800	2.2	150	40
P1500Z_	140	180	4	5	800	2.2	150	40
P1800Z_	170	220	4	5	800	2.2	150	30
P2300Z_	190	260	4	5	800	2.2	150	30
P2600Z_	220	300	4	5	800	2.2	150	30
P3100Z_	275	350	4	5	800	2.2	150	30
P3500Z_	320	400	4	5	800	2.2	150	30

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

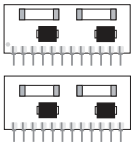
General Notes:

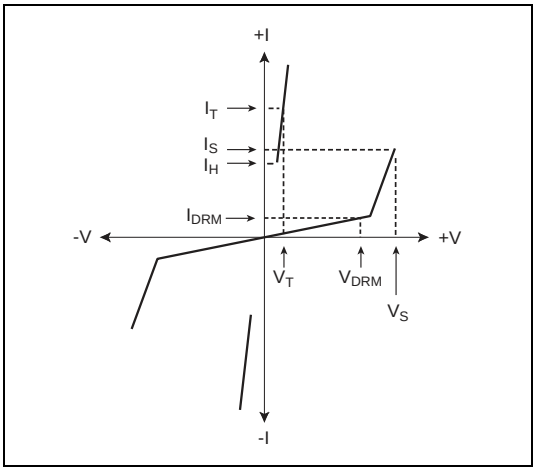
- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- I_{PP} is a repetitive surge rating and is guaranteed for the life of the product.
- Listed *SIDACtor* devices are bi-directional. All electrical parameters and surge ratings apply 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 (C_O) is measured at 1 MHz with a 2 V bias and is a typical value for “ZA” and “ZB” product. “ZC” capacitance is approximately 2x the listed value.
- Lower capacitance MC versions may be available. Contact factory for further information.

Surge Ratings

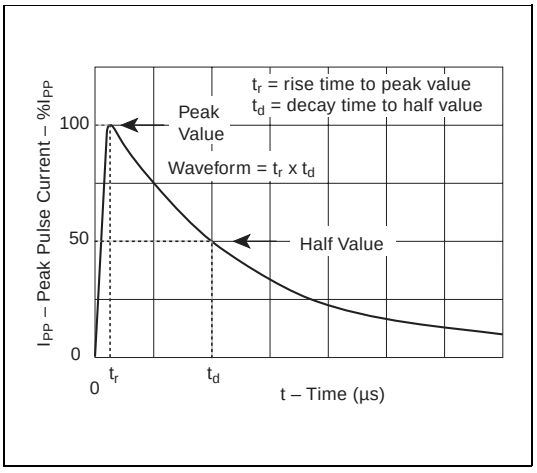
Series	I_{PP} 2x10 µs Amps	I_{PP} 8x20 µs Amps	I_{PP} 10x160 µs Amps	I_{PP} 10x560 µs Amps	I_{PP} 10x1000 µs Amps	I_{TSM} 60 Hz Amps	di/dt Amps/µs
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

Thermal Considerations

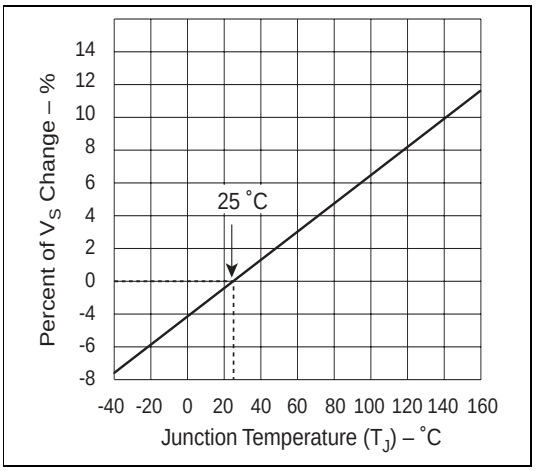
Package	Symbol	Parameter	Value	Unit
SIP 	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W



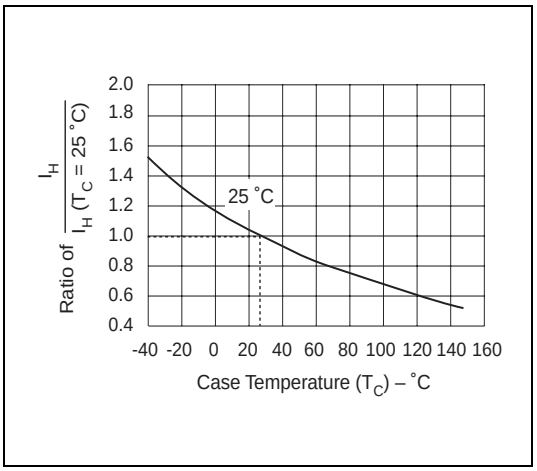
V-I Characteristics



t_r x t_d Pulse Waveform



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature