## **Fixed Voltage SLIC Protector**



These DO-214AA unidirectional protectors are constructed with a *SIDACtor* device and an integrated diode. They protect SLICs (Subscriber Line Interface Circuits) from damage during transient voltage activity and enable line cards to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA-968 (formerly known as FCC Part 68).



For specific design criteria, see details in Figure 3.23.

## Electrical Parameters

Part Number *	V <sub>DRM</sub> Volts	V <sub>S</sub> Volts	V <sub>T</sub> Volts	V <sub>F</sub> Volts	Ι <sub>DRM</sub> μAmps	l <sub>S</sub> mAmps	l <sub>T</sub> Amps	l <sub>H</sub> mAmps	C <sub>O</sub> pF
P0641S_	58	77	4	5	5	800	1	120	70
P0721S_	65	88	4	5	5	800	1	120	70
P0901S_	75	98	4	5	5	800	1	120	70
P1101S_	95	130	4	5	5	800	1	120	70

\* For individual "SA" and "SC" surge ratings, see table below.

General Notes:

• All measurements are made at an ambient temperature of 25 °C. IPP applies to -40 °C through +85 °C temperature range.

• IPP is a repetitive surge rating and is guaranteed for the life of the product.

V<sub>DRM</sub> is measured at I<sub>DRM</sub>.

+  $V_{S}$  and  $V_{F}$  are measured at 100 V/µs.

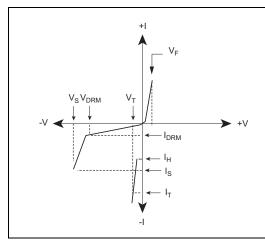
- Special voltage (V<sub>S</sub> and V<sub>DRM</sub>) and holding current (I<sub>H</sub>) requirements are available upon request.
- Off-state capacitance is measured at 1 MHz with a 2 V bias and is a typical value for "SA" and "SB" product. "SC" capacitance is approximately 2x the listed value.
- Parallel capacitive loads may affect electrical parameters.

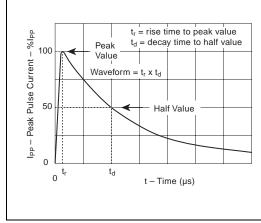
## Surge Ratings (Preliminary Data)

Series	l <sub>PP</sub> 2x10 μs Amps	l <sub>PP</sub> 8x20 μs Amps	l <sub>PP</sub> 10x160 μs Amps	l <sub>PP</sub> 10x560 μs Amps	l <sub>PP</sub> 10x1000 μs Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/µs
А	150	150	90	50	45	20	500
С	500	400	200	150	100	50	500

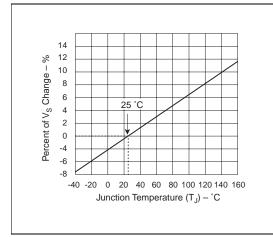
## **Thermal Considerations**

Package	Symbol	Parameter	Value	Unit	
DO-214AA	TJ	Operating Junction Temperature Range	-40 to +150	°C	
	Ts	Storage Temperature Range	-65 to +150	°C	
	$R_{ heta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W	



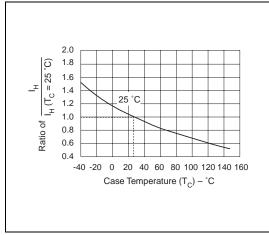


V-I Characteristics



Normalized  $\mathsf{V}_\mathsf{S}$  Change versus Junction Temperature

 $t_r \ x \ t_d$  Pulse Wave-form



Normalized DC Holding Current versus Case Temperature

