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 3.22.

Electrical Parameters

Part Number *	V _{DRM} Volts	V _S Volts	V _T Volts	V _F Volts	I _{DRM} μAmps	I _S mAmps	I _T Amps	I _H mAmps	C _O 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
P1701S_	160	200	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. 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.
- V_{DRM} is measured at I_{DRM}.
- $V_S \, and \, V_F \, are \, measured \, at \, 100 \, V/\mu s.$
- Special voltage (V_S and V_{DRM}) and holding current (I_H) 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	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
Α	150	150	90	50	45	20	500
С	500	400	200	150	100	50	500

t_r = rise time to peak value t_d = decay time to half value

Half Value

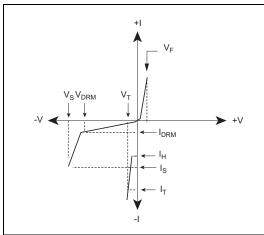
t - Time (µs)

Peak

Value Waveform $= t_r \times t_d$

Thermal Considerations

Package	Symbol	nbol Parameter		Unit
DO-214AA	TJ	Operating Junction Temperature Range	-40 to +150	°C
	Ts	Storage Temperature Range	-65 to +150	°C
	R _{θJA}	Thermal Resistance: Junction to Ambient	90	°C/W



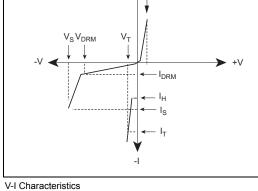
t_r x t_d Pulse Wave-form

Ipp - Peak Pulse Current - %Ipp

100

50

0 0^{t_r}



14 12 Percent of V_S Change – % 10 8 6 2 0 -4 -6 -8 -40 -20 0 20 40 60 80 100 120 140 160 Junction Temperature $(T_J) - {^{\circ}C}$



