Fixed Voltage SLIC Protector

○ (T/R)

○ (G)

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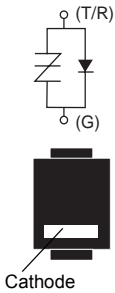
These DO-214AA unidirectional protectors are constructed with a *SIDACtor* device and an integrated diode. They protect SLICs (Subscriber Line Interface Circuits) from damage during transient voltage activity and enable line cards to meet various regulatory requirements including GR 1089, ITU K.20, K.21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

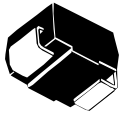* For individual "SA" and "SC" surge ratings, see table below.

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/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 "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
A	150	150	90	50	45	20	500
C	500	400	200	150	100	50	500

Thermal Considerations

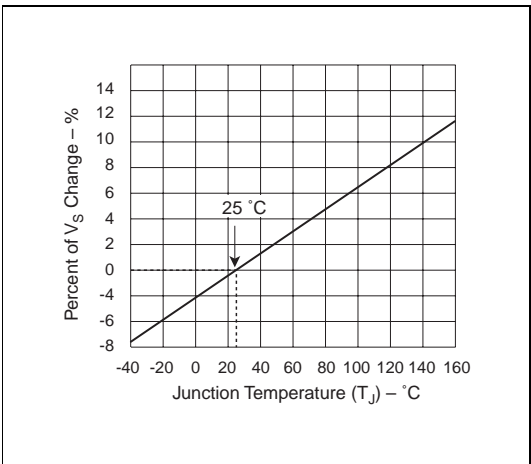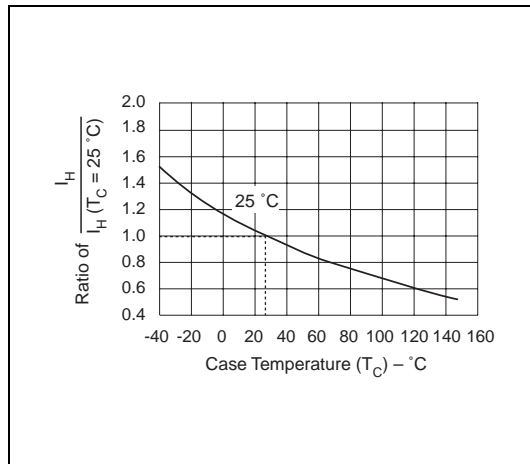| Package	Symbol	Parameter	Value	Unit
DO-214AA	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W
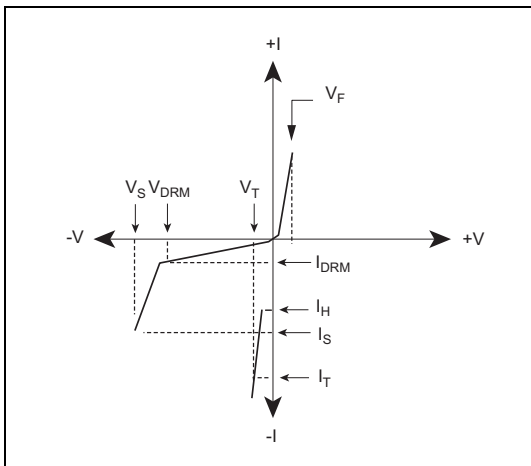
V-I Characteristics
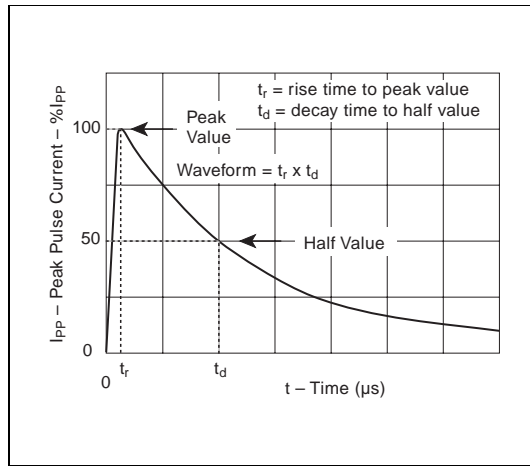
t_r x t_d Pulse Wave-form

Normalized V_S Change versus Junction Temperature

Normalized DC Holding Current versus Case Temperature