# **Twin SLIC Protector**



Subscriber Line Interface Circuits (SLIC) are highly susceptible to transient voltages, such as lightning and power cross conditions. To minimize this threat, Littelfuse provides this dual-chip, fixed-voltage SLIC protector device.

For specific design criteria, see details in Figure 3.29.

#### **Electrical Parameters**

Part	V <sub>DRM</sub> Volts	V <sub>S</sub> Volts	Vτ	VF	I <sub>DRM</sub>	ls	Ιτ	lμ	co
Number *	Pins 1-2, 3-2		Volts	Volts	μAmps	mAmps	Amps	mAmps	pF
P0641CA2	58	77	4	5	5	800	1	120	60
P0721CA2	65	88	4	5	5	800	1	120	60
P0901CA2	75	98	4	5	5	800	1	120	60
P1101CA2	95	130	4	5	5	800	1	120	60
P1701CA2	160	200	4	5	5	800	1	120	70

<sup>\*</sup> For surge ratings, see table below.

#### General Notes:

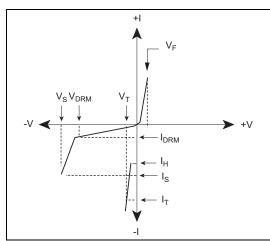
- All measurements are made at an ambient temperature of 25 °C. IPP applies to -40 °C through +85 °C temperature range.
- $\ensuremath{\mathsf{I}_{PP}}$  is a repetitive surge rating and is guaranteed for the life of the product.
- V<sub>DRM</sub> is measured at I<sub>DRM</sub>.
- $V_S$  and  $V_F$  are measured at 100 V/ $\mu s$ .
- 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 (C<sub>O</sub>) is measured across pins 1-2 or 3-2 at 1 MHz with a 2 V bias. Capacitance across pins 1-3 is approximately half.
- Parallel capacitive loads may affect electrical parameters.
- Compliance with GR 1089 or UL 60950 power cross tests may require special design considerations. Contact the factory for further information

## Surge Ratings (Preliminary Data)

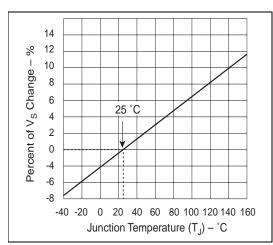
	Series	l <sub>PP</sub> 2x10 μs Amps	I <sub>PP</sub> 8x20 μs Amps	I <sub>PP</sub> 10x160 μs Amps	I <sub>PP</sub> 10x560 μs Amps	I <sub>PP</sub> 10x1000 μs Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/µs
ı	Α	150	150	90	50	45	20	500

### **Thermal Considerations**

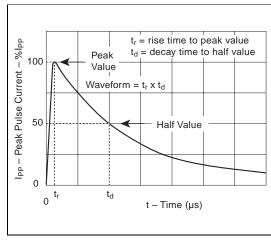
Package	Symbol	Parameter	Value	Unit
Modified DO-214AA	TJ	Operating Junction Temperature Range	-40 to +150	°C
Pin 3	Ts	Storage Temperature Range	-65 to +150	°C
Pin 1	$R_{ hetaJA}$	Thermal Resistance: Junction to Ambient	85	°C/W



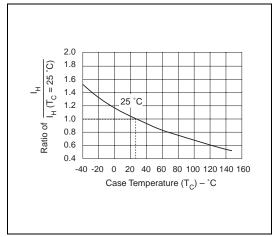
V-I Characteristics



Normalized V<sub>S</sub> Change versus Junction Temperature



 $t_{\rm r} \ x \ t_{\rm d}$  Pulse Wave-form



Normalized DC Holding Current versus Case Temperature