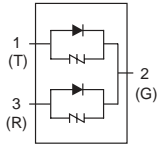


Twin SLIC Protector



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 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 |
|---------------|---------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|------------------------|-------------------------|----------------------|
| | Pins 1-2, 3-2 | | | | | | | | |
| 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 |

* For surge ratings, see table below.

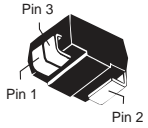
General Notes:

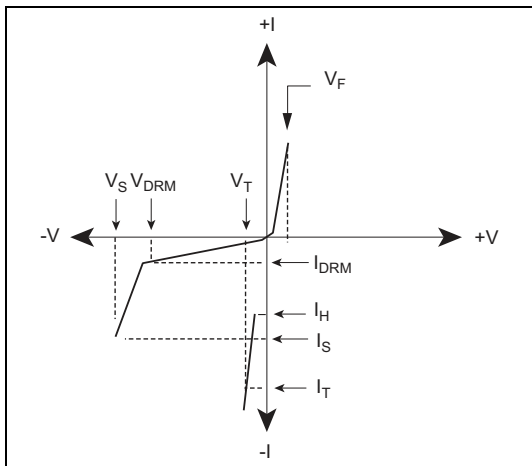
- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- I_{PP} is a repetitive surge rating and is guaranteed for the life of the product.
- V_{DRM} is measured at I_{DRM}.
- V_S and V_F are measured at 100 V/μs.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.
- Off-state capacitance (C_O) is measured 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)

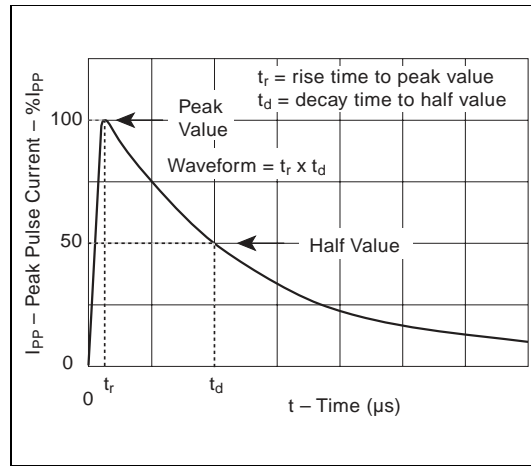
| Series | I _{PP} 2x10 μs Amps | I _{PP} 8x20 μs Amps | I _{PP} 10x160 μs Amps | I _{PP} 10x560 μs Amps | I _{PP} 10x1000 μs Amps | I _{TSM} 60 Hz Amps | di/dt Amps/μs |
|--------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|------------------|
| A | 150 | 150 | 90 | 50 | 45 | 20 | 500 |

Thermal Considerations

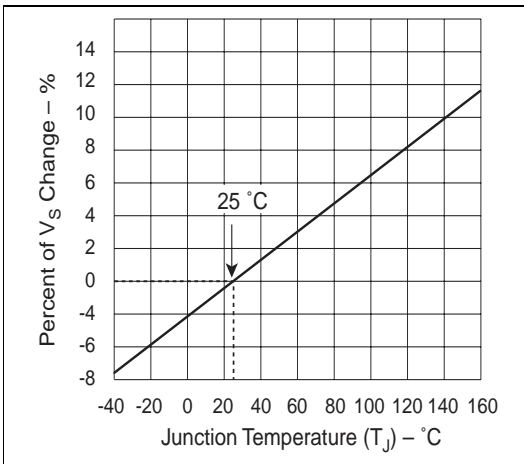
| Package | Symbol | Parameter | Value | Unit |
|--|-----------------|---|-------------|----------------------|
| Modified DO-214AA  | T_J | Operating Junction Temperature Range | -40 to +150 | $^{\circ}\text{C}$ |
| | T_S | Storage Temperature Range | -65 to +150 | $^{\circ}\text{C}$ |
| | $R_{\theta JA}$ | Thermal Resistance: Junction to Ambient | 85 | $^{\circ}\text{C/W}$ |



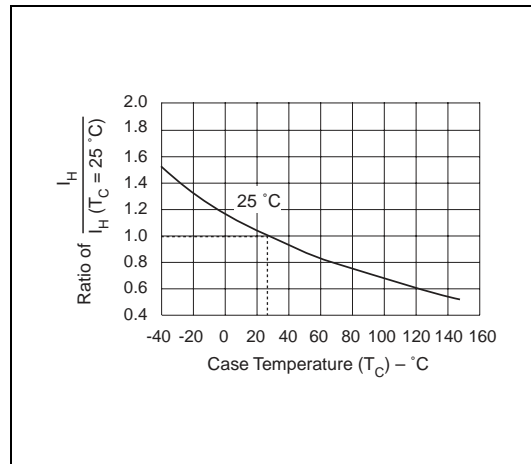
V-I Characteristics



$t_r \times t_d$ Pulse Wave-form



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Data Sheets