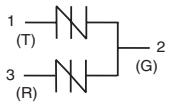
Compak *TwinCHIP*™ *SIDACtor*® Device

RoHS

Littelfuse



The modified DO-214AA *SIDACtor* devices provide low-cost, longitudinal protection.

SIDACtor devices enable equipment to comply with 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).

Electrical Parameters

Part Number	V_{DRM} Volts	V_S Volts	V_{DRM} Volts	V_S Volts	V_T Volts	I_{DRM} µAmps	I_S mAmps	I_T Amps	I_H mAmps
	Pins1-2, 2-3		Pins 1-3						
P1402C_L	58	77	116	154	4	5	800	2.2	120
P1602C_L	65	95	130	190	4	5	800	2.2	120
P2202C_L	90	130	180	260	4	5	800	2.2	120
P2702C_L	120	160	240	320	4	5	800	2.2	120
P3002C_L	140	180	280	360	4	5	800	2.2	120
P3602C_L	170	220	340	440	4	5	800	2.2	120
P4202C_L	190	250	380	500	4	5	800	2.2	120
P4802C_L	220	300	440	600	4	5	800	2.2	120
P6002C_L	275	350	550	700	4	5	800	2.2	120

* **"L" in part number indicates RoHS compliance.** For non-RoHS compliant device, delete "L" from part number.
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.
- Listed *SIDACtor* devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V_{DRM} is measured at I_{DRM}.
- V_S is measured at 100 V/µs.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.
- UL 60950 creepage requirements must be considered.

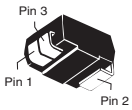
Surge Ratings in Amps

Series	I_{PP}									I_{TSM}	di/dt
	0.2x310 * 0.5x700 **	2x10 * 2x10 **	8x20 * 1.2x50 **	10x160 * 10x160 **	10x560 * 10x560 **	5x320 * 9x720 **	10x360 * 10x360 **	10x1000 * 10x1000 **	5x310 * 10x700 **	50 / 60 Hz	
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps/µs
A	20	150	150	90	50	75	75	45	75	20	500
B	25	250	250	150	100	100	125	80	100	30	500

* Current waveform in µs
** Voltage waveform in µs

Note: Contact factory for release date of Series B.

Thermal Considerations

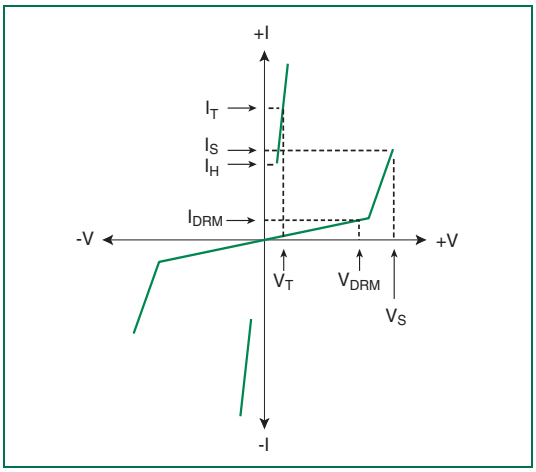
Package	Symbol	Parameter	Value	Unit
Modified DO-214AA 	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	85	°C/W

Capacitance Values

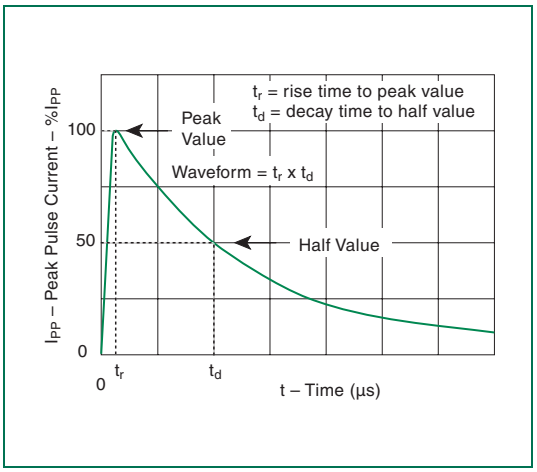
Part Number *	pF Pin 1-2 / 3-2 Tip-Ground, Ring-Ground		pF Pin 1-3 Tip-Ring	
	MIN	MAX	MIN	MAX
P1402C[A/B]L	30	55	15	35
P1602C[A/B]L	30	55	15	30
P2202C[A/B]L	25	50	15	30
P2702C[A/B]L	25	45	10	25
P3002C[A/B]L	20	40	10	25
P3602C[A/B]L	20	40	10	25
P4202C[A/B]L	20	40	10	25
P4802C[A/B]L	20	35	10	20
P6002C[A/B]L	15	35	10	20

* [A/B] in part number indicates that values are for both A and B surge ratings.
Note: Off-state capacitance (C_O) is measured at 1 MHz with a 2 V bias.

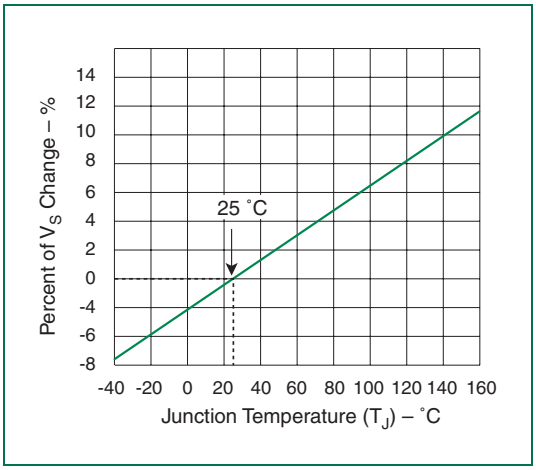
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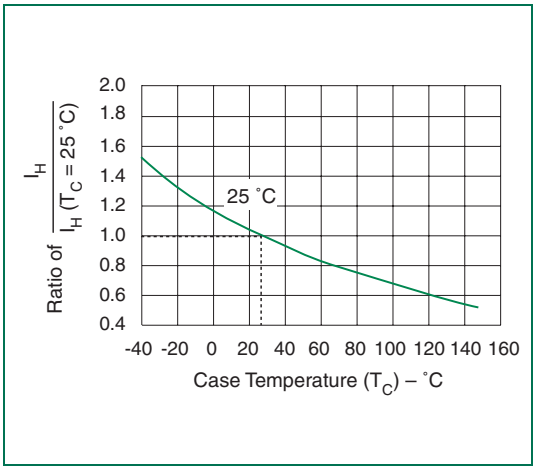
V-I Characteristics



t_r x t_d Pulse Waveform



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature