

MicroCapacitance (MC) SC SIDACtor Device



The DO-214AA SC MC SIDACtor series is intended for applications sensitive to load values. Typically, high speed connections require a lower capacitance. C_O values for the MicroCapacitance device are 40% lower than a standard SC part.

This MC SIDACtor series is used to enable equipment to meet various regulatory requirements including GR 1089, IEC 60950, UL 60950, and TIA-968-A (formerly known as FCC Part 68). Contact factory regarding ITU K.20, K.21, and K.45.

Electrical Parameters

| Part Number * | V_{DRM} Volts | V_S Volts | V_T Volts | I_{DRM} μ Amps | I_S mAmps | I_T Amps | I_H mAmps | C_O pF |
|---------------|-----------------|-------------|-------------|----------------------|-------------|------------|-------------|----------|
| P0080SC MC | 6 | 25 | 4 | 5 | 800 | 2.2 | 50 | 55 |
| P0300SC MC | 25 | 40 | 4 | 5 | 800 | 2.2 | 50 | 35 |
| P0640SC MC | 58 | 77 | 4 | 5 | 800 | 2.2 | 150 | 60 |
| P0720SC MC | 65 | 88 | 4 | 5 | 800 | 2.2 | 150 | 60 |
| P0900SC MC | 75 | 98 | 4 | 5 | 800 | 2.2 | 150 | 60 |
| P1100SC MC | 90 | 130 | 4 | 5 | 800 | 2.2 | 150 | 50 |
| P1300SC MC | 120 | 160 | 4 | 5 | 800 | 2.2 | 150 | 50 |
| P1500SC MC | 140 | 180 | 4 | 5 | 800 | 2.2 | 150 | 50 |
| P1800SC MC | 170 | 220 | 4 | 5 | 800 | 2.2 | 150 | 40 |
| P2300SC MC | 190 | 260 | 4 | 5 | 800 | 2.2 | 150 | 40 |
| P2600SC MC | 220 | 300 | 4 | 5 | 800 | 2.2 | 150 | 40 |
| P3100SC MC | 275 | 350 | 4 | 5 | 800 | 2.2 | 150 | 40 |
| P3500SC MC | 320 | 400 | 4 | 5 | 800 | 2.2 | 150 | 40 |

* For surge ratings, see table below.

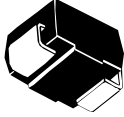
General Notes:

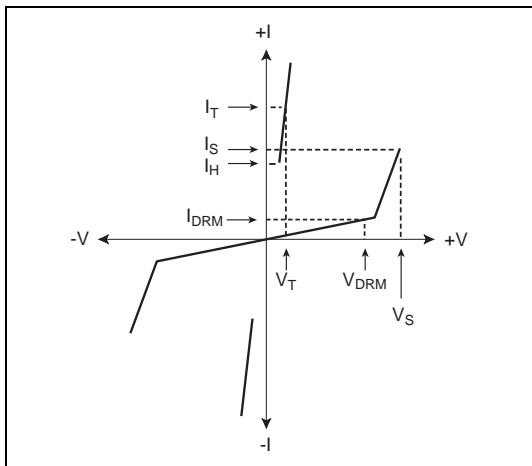
- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- I_{PP} is a repetitive surge rating and is guaranteed for the life of the product.
- Listed SIDACtor devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V_{DRM} is measured at I_{DRM} .
- V_S is measured at 100 V/ μ s.
- 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.

Surge Ratings

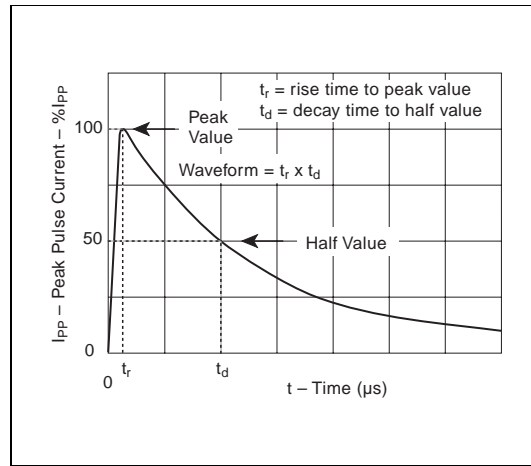
| Series | I_{PP} 2x10 μ s Amps | I_{PP} 8x20 μ s Amps | I_{PP} 10x160 μ s Amps | I_{PP} 10x560 μ s Amps | I_{PP} 10x1000 μ s Amps | I_{TSM} 60 Hz Amps | di/dt Amps/ μ s |
|--------|----------------------------|----------------------------|------------------------------|------------------------------|-------------------------------|----------------------|---------------------|
| C | 500 | 400 | 200 | 150 | 100 | 30 | 500 |

Thermal Considerations

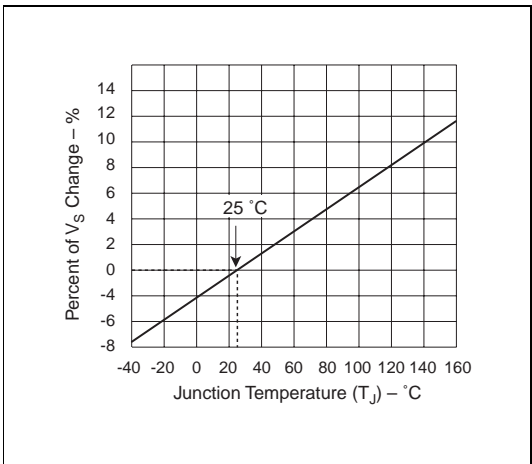
| Package | Symbol | Parameter | Value | Unit |
|---|-----------------|---|-------------|-----------------------------|
|  | T_J | Operating Junction Temperature Range | -40 to +150 | $^{\circ}\text{C}$ |
| | T_S | Storage Temperature Range | -65 to +150 | $^{\circ}\text{C}$ |
| | $R_{\theta JA}$ | Thermal Resistance: Junction to Ambient | 90 | $^{\circ}\text{C}/\text{W}$ |



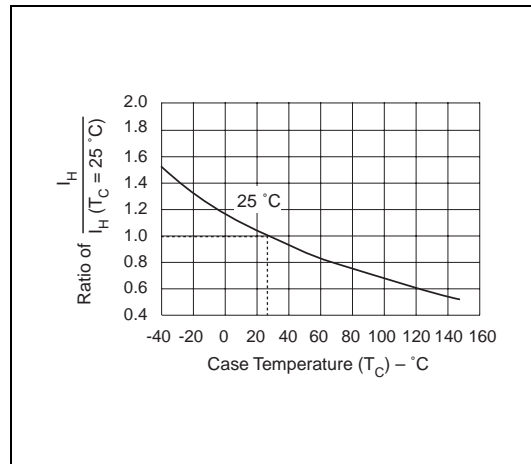
V-I Characteristics



$t_r \times t_d$ Pulse Wave-form



Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Data Sheets

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Littelfuse:](#)

[P2600SCLRP](#) [P3100SALRP](#)