

## 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 <sub>DRM</sub> Volts	V <sub>S</sub> Volts	V <sub>T</sub> Volts	I <sub>DRM</sub> $\mu$ Amps	I <sub>S</sub> mAmps	I <sub>T</sub> Amps	I <sub>H</sub> mAmps	C <sub>O</sub> 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.

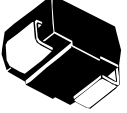
### General Notes:

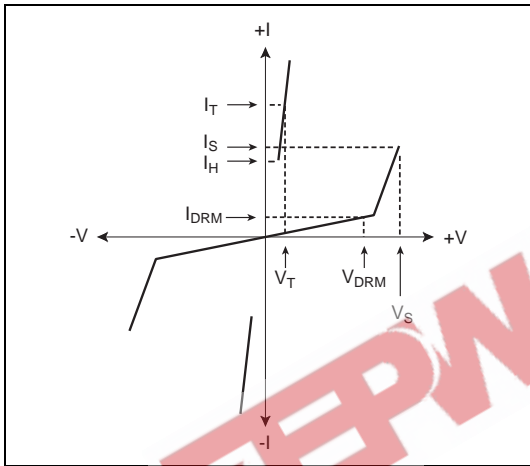
- All measurements are made at an ambient temperature of 25 °C. I<sub>PP</sub> applies to -40 °C through +85 °C temperature range.
- I<sub>PP</sub> is a repetitive surge rating and is guaranteed for the life of the product.
- Listed SIDACtor devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- V<sub>DRM</sub> is measured at I<sub>DRM</sub>.
- V<sub>S</sub> is 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 at 1 MHz with a 2 V bias.

### Surge Ratings

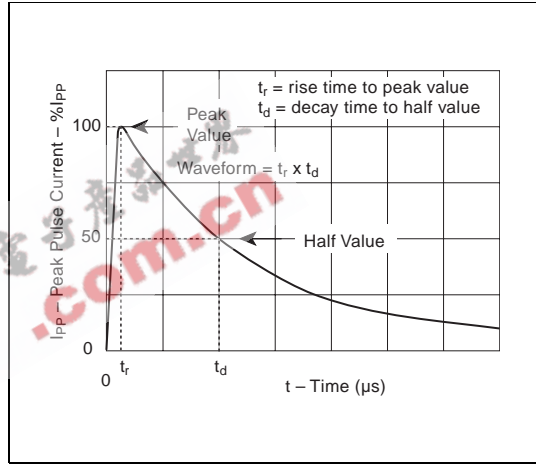
Series	I <sub>PP</sub> 2x10 $\mu$ s Amps	I <sub>PP</sub> 8x20 $\mu$ s Amps	I <sub>PP</sub> 10x160 $\mu$ s Amps	I <sub>PP</sub> 10x560 $\mu$ s Amps	I <sub>PP</sub> 10x1000 $\mu$ s Amps	I <sub>TSM</sub> 60 Hz Amps	di/dt Amps/ $\mu$ s
C	500	400	200	150	100	30	500

Thermal Considerations

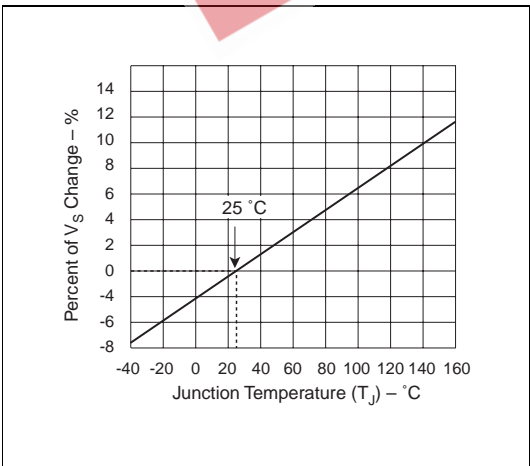
Package	Symbol	Parameter	Value	Unit
	$T_J$	Operating Junction Temperature Range	-40 to +150	$^{\circ}\text{C}$
	$T_S$	Storage Temperature Range	-65 to +150	$^{\circ}\text{C}$
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	$^{\circ}\text{C}/\text{W}$



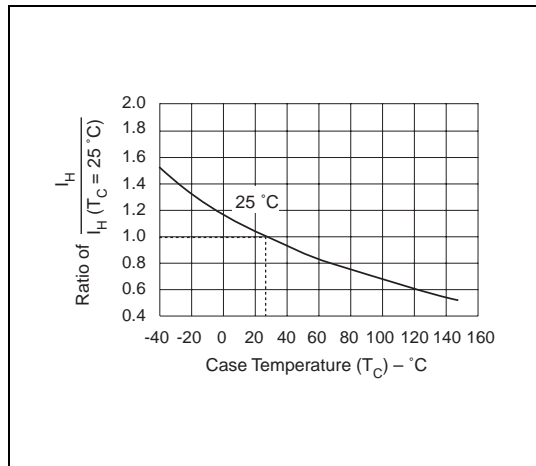
V-I Characteristics



$t_r \times t_d$  Pulse Wave-form



Normalized  $V_S$  Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Data Sheets