

**SIDACTOR**

**FEATURES**

- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

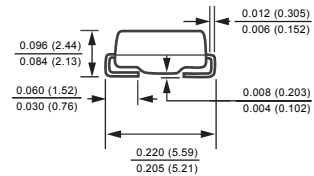
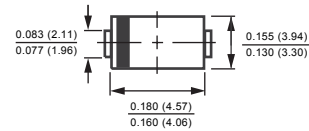
- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.098 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**DO-214AA**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

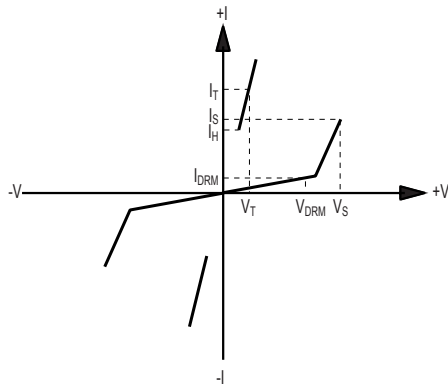
RATINGS	SYMBOL	SMB2300C	UNITS
Peak One-Cycle Surge Current (Note 1)	I <sub>TSM</sub>	100	Amps
Off-state Capacitance (Note 2)	C <sub>O</sub>	38	pF

**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

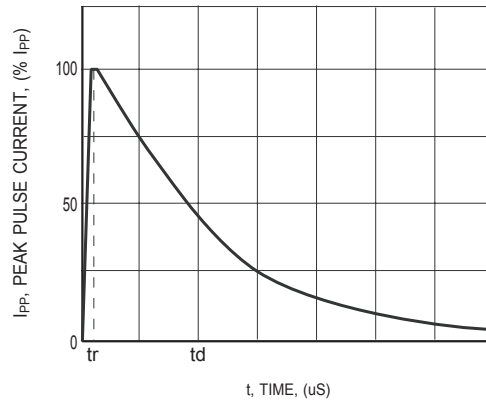
CHARACTERISTICS	SYMBOL	SMB2300C	UNITS
Minimum On-state Voltage at 1.0A	V <sub>T</sub>	4	Volts
Peak Off-state Voltage @V <sub>DRM</sub> = 190V	I <sub>DRM</sub>	5	uA
Switching Voltage @I <sub>S</sub> = 800mA (Note 3)	V <sub>S</sub>	260	V
Holding Current	I <sub>H</sub>	150	mA

- NOTES : 1. Surge rating test standard : 10/100uS.  
2. Off-state capacitance is measured at 10KHz @0.3V with a DC48V bias.  
3. V<sub>S</sub> is measured at 100V/uS.  
4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

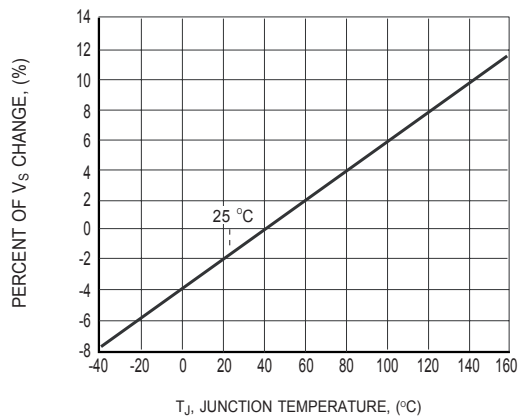
## RATING AND CHARACTERISTICS CURVES ( SMB2300C )



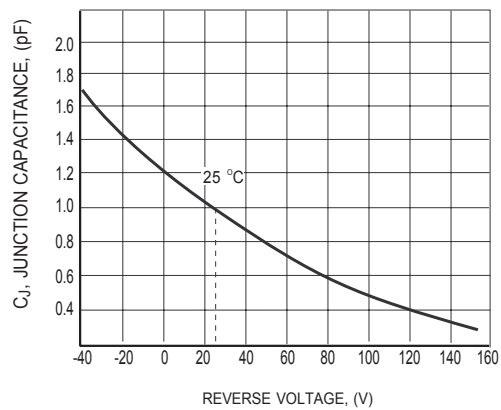
**FIG.1 V-I CHARACTERISTICS**



**FIG.2 PULSE WAVE-FORM**

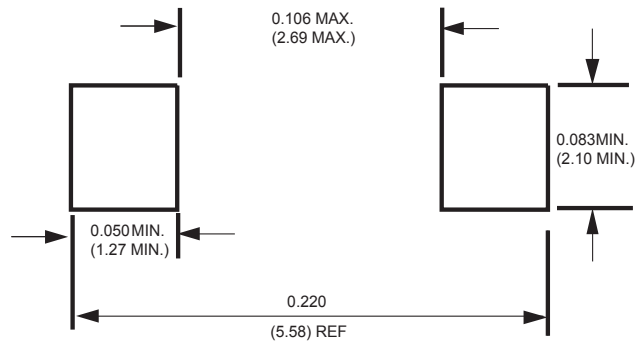


**FIG.3 NORMALIZED  $V_S$  CHANGE vs. JUNCTION TEMPERATURE**



**FIG.4 NORMALIZED DC HOLDING CURRENT vs. CASE TEMPERATURE**

## Mounting Pad Layout



Dimensions in inches and (millimeters)

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