### **Features**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Open Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

### **Mechanical Data**

Case: JEDEC 60B molded plastic body

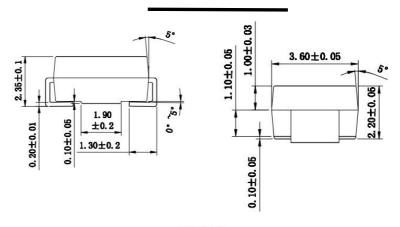
Terminals: Solderable per MIL-STD-750, Method 2026 Polarity: Polarity symbol marking on body Mounting

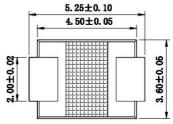
Position: Any

Weight: 0.005ounce, 0.138grams

### **Maximum Ratings And Elect Characteristics**

DO-214AA/SMB





Dimiensions in inches and (milimeters)

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

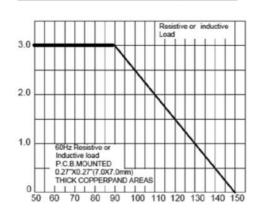
Type Number	SYMBOL	S3A	unit
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	50	V
Maximum RMS Voltage	$V_{ m RMS}$	35	V
Maximum DC blocking Voltage	$V_{ m DC}$	50	V
Maximum Average Forward Rectified Current .at TA =55°C	$I_{\mathrm{F(AV)}}$	3	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{ m FSM}$	100	A
Maximum Forward Voltage at 1.5A DC	$V_{ m F}$	1.1	V
	I <sub>R</sub>	10.0	μA
Maximum DC Reverse Current @T <sub>A</sub> =25°C At rated DC blocking voltage @T <sub>A</sub> =100°C		100	
Typical Junction Capacitance (Note1)	Cj	35	pF
Typical Thermal Resistance (Note 2)	$R_{(\mathrm{JA})}$	40	°C /W
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C
Operation Junction Temperature	$T_{ m J}$	-55 to +150	°C

Note: 1. Pulse Test with PW=300µsec,2% Duty Cycle.

2. Mounted on P.C.Board with 5.0mm2(.013mm thick)copper pad areas.

### FIG.1 - FORWARD DERATING CURVE

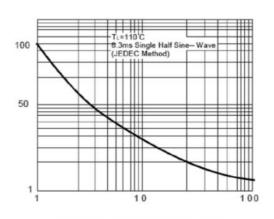
### AVERAGE FORWARD CURRENT, AMPERES



LEAD TEMPERATURE °C

### FIG.2 PEAK FORWARD SURGE CURRENT

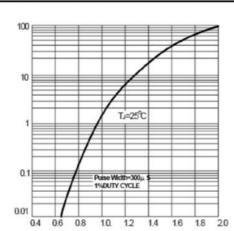
PEAK FORWARD SURGE CURRENT, AMPERES



NUMBER OF CYCLES AT 60Hz

### FIG.3 - TYPICAL FORWARD CHARACTERISTICS

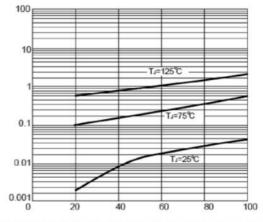
## INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

### FIG.4 - TYPICAL REVERSE CHARACTERISTICS

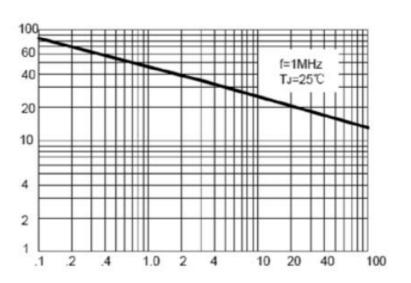
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

### FIG.5-TYPICAL JUNCTION CAPACITANCE

# JUNCTION CAPACITANCE PF



### REVERSE VOLTAGE, VOLTS