



## Features

- Average Forward Current:  $I_{F(AV)} = 3A$
- Polarity: Color band denotes cathode



## Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|------|---------|----------|
| HS3MB13F   | SMB  | S3M     | 3000     |

**SMB**



## Maxmim Ratings (Ta=25 unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Type Number   | S3M        | Units   |
|---|------------|---------|
| Maximum Recurrent Peak Reverse Voltage  | 1000       | V       |
| Maximum RMS Voltage   | 700        | V       |
| Maximum DC Blocking Voltage   | 1000       |         |
| Maximum Average Forward Rectified Current<br>At $T_L=75^\circ C$                                      | 3.0        | A       |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 100        | A       |
| Maximum Instantaneous Forward Voltage at 3.0A   | 1.10       | V       |
| Maximum DC Reverse Current $T_a=25^\circ C$<br>at Rated DC Blocking Voltage $T_a=125^\circ C$         | 5.0        | $\mu A$ |
| Typical Junction Capacitance (Note1)  | 250        | $\mu A$ |
| Typical Thermal Resistance R <sub>qJL</sub> (Note 2)  | 60         | pF      |
| Operating and Storage Temperature Range $T_J$ , $T_{STG}$   | 13         | °C/W    |
|   | -65 — +150 | °C      |

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.



## Typical Characteristics

FIG.1-TYPICAL FORWARD  
CHARACTERISTICS

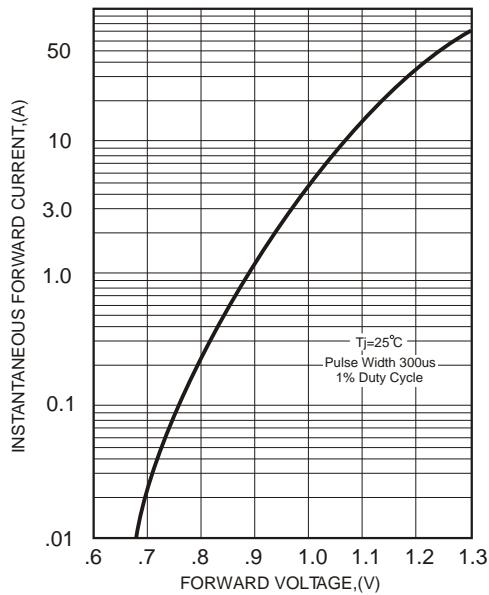


FIG.3 - TYPICAL REVERSE  
CHARACTERISTICS

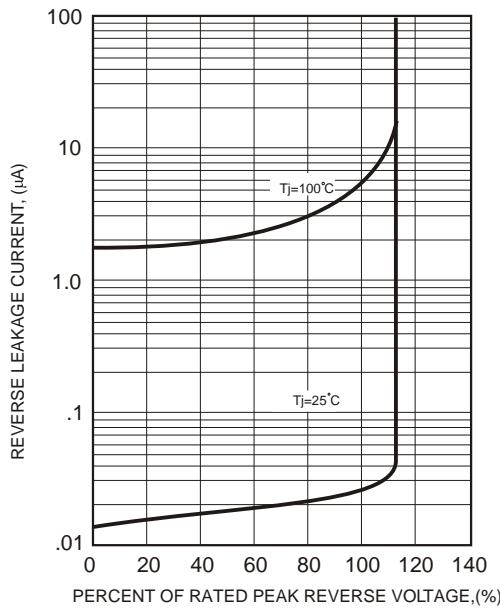


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

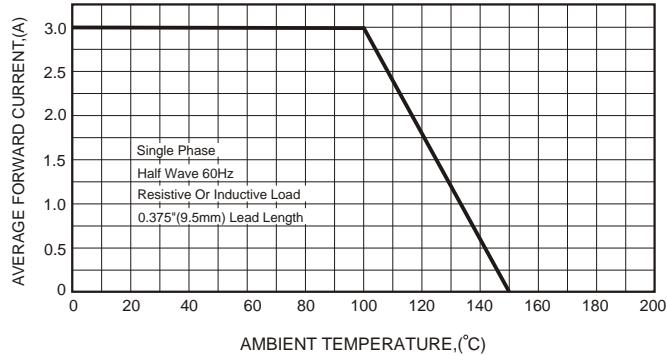


FIG.4-MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

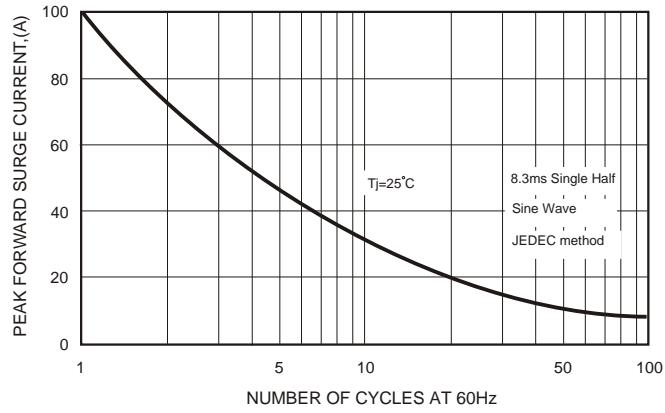
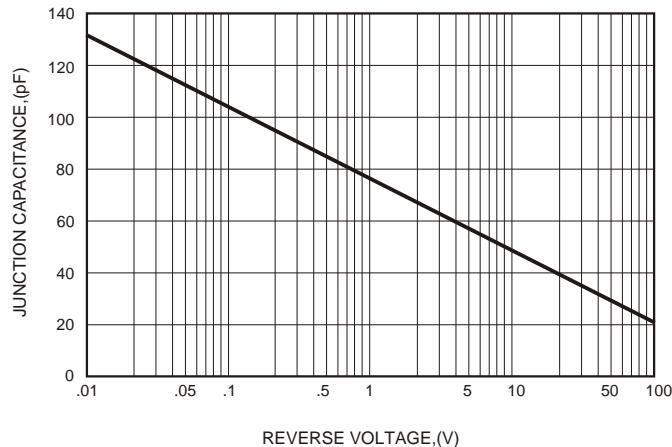
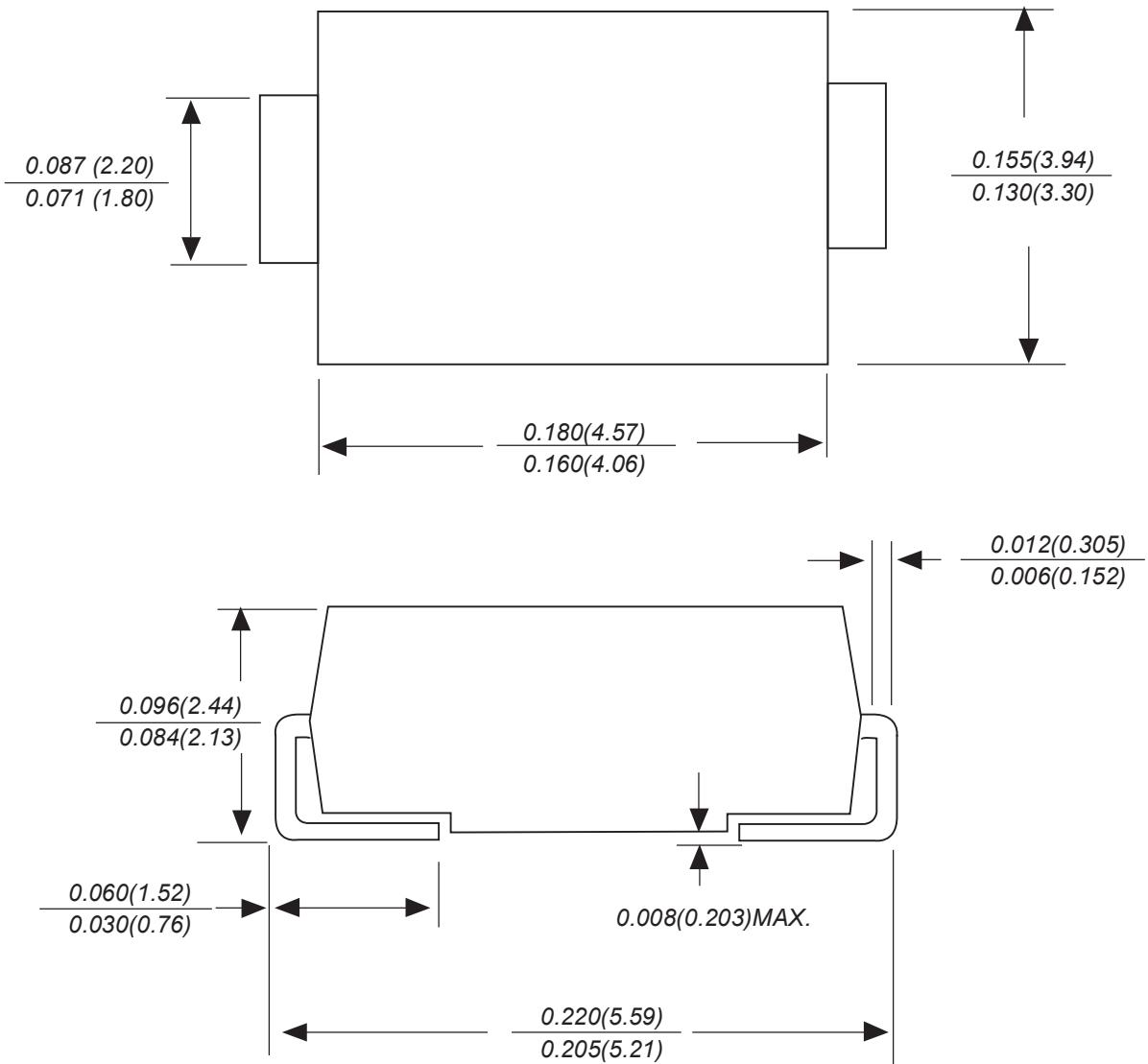


FIG.5-TYPICAL JUNCTION CAPACITANCE





### SMB Package Outline Dimensions



*Dimensions in inches and (millimeters)*



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