



FEATURES

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



SMB

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
S3M	SMB	S3MB	3000



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
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 At $T_L=75^\circ\text{C}$	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100	A
Maximum Instantaneous Forward Voltage at 3.0A	1.10	V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	5.0	μA
at Rated DC Blocking Voltage $T_a=125^\circ\text{C}$	250	μA
Typical Junction Capacitance (Note1)	60	pF
Typical Thermal Resistance R_{JL} (Note 2)	13	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range T_J, T_{STG}	-65 — +150	$^\circ\text{C}$

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

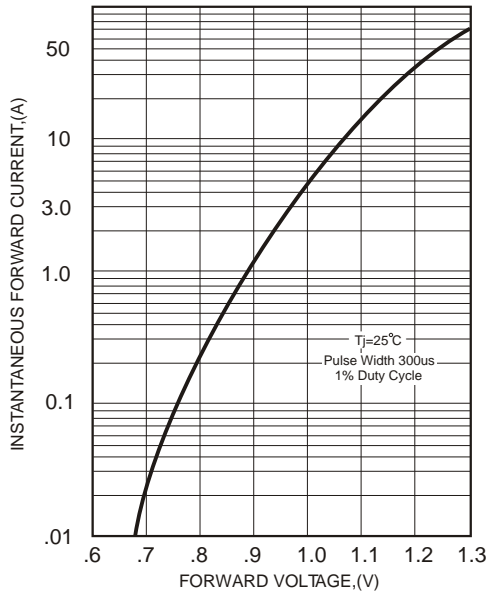


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

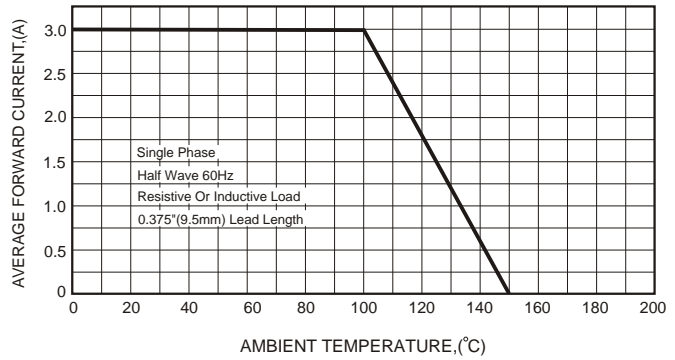


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

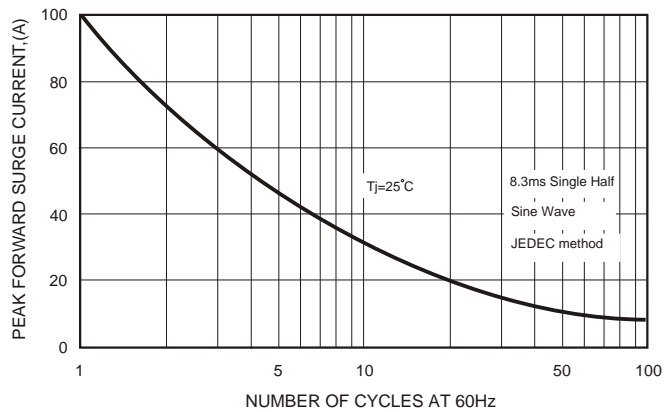


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

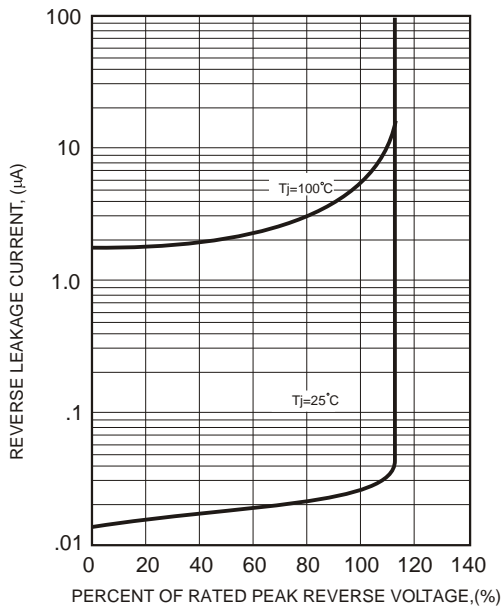
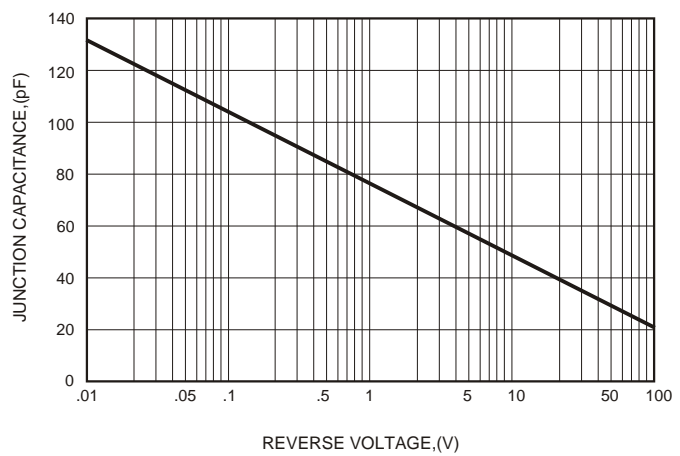
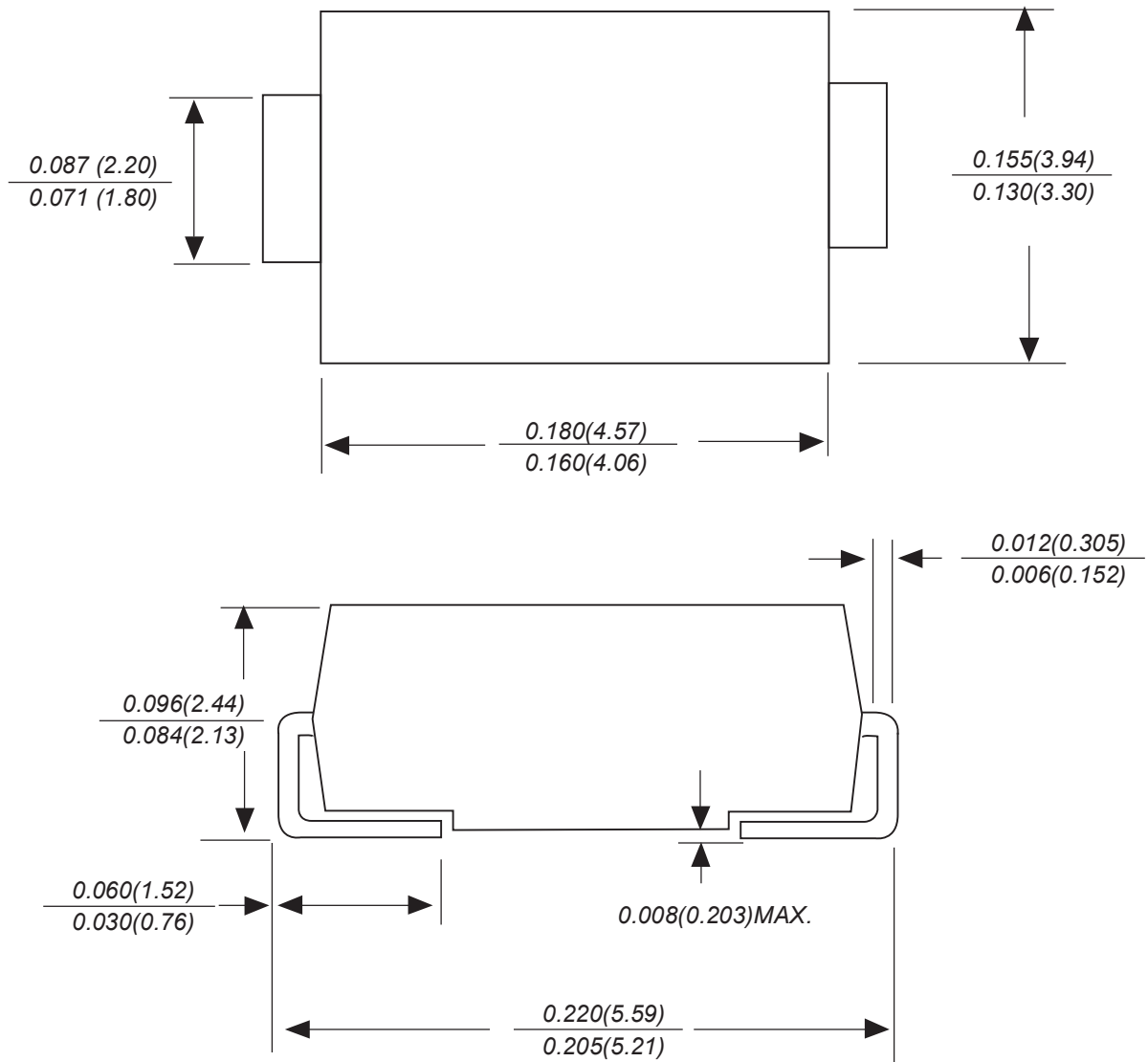


FIG.5-TYPICAL JUNCTION CAPACITANCE





SMB Package Outline Dimensions



Dimensions in inches and (millimeters)



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