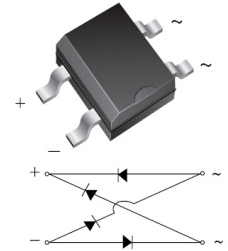


## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated super fast recovery bridge rectifiers
- High surge overload rating: 30A peak
- Space saving
- High temperature soldering guaranteed: 260°C /10 seconds
- Add suffix "E" for Halogen-free
- Halogen-free according to IEC 61249-2-21



Package: TO-269AA(MBS)



## Mechanical Data

- Case: Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Weight: 0.078 oz., 0.22g

## Maximum Ratings and Electrical Characteristics

(T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	SMB4S	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	V
Maximum Average Forward Output Current(see Fig.1)	I <sub>F(AV)</sub>	1.0	A
Peak Forward Surge Current (8.3ms single half sine wave superimposed on rated load) (JEDEC method)	I <sub>FSM</sub>	30	A
Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	3.7	A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop Per Leg at 1.0A	V <sub>F</sub>	1.30	V
Maximum DC Reverse Current at T <sub>A</sub> =25°C	I <sub>R</sub>	5	μA
Rated DC Blocking Voltage Per Leg T <sub>A</sub> =125°C		500	
Maximum reverse recovery time I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A	T <sub>rr</sub>	35	ns
Typical Thermal Resistance per Leg (Note 1)	R <sub>θJA</sub>	55	°C/W
	R <sub>θJC</sub>	25	
Typical Junction Capacitance at 4.0V, 1.0MHz	C <sub>J</sub>	16	pF
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

**Notes:** 1. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads

## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

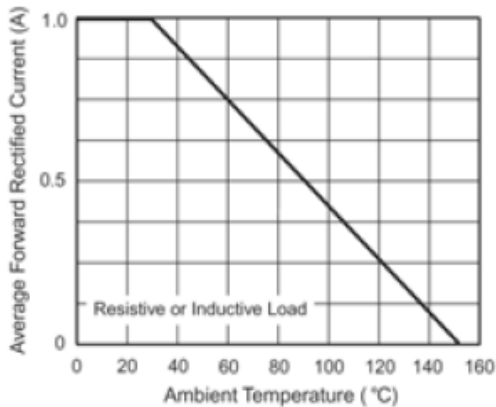


Figure 1. Derating Curve for Output Rectified Current

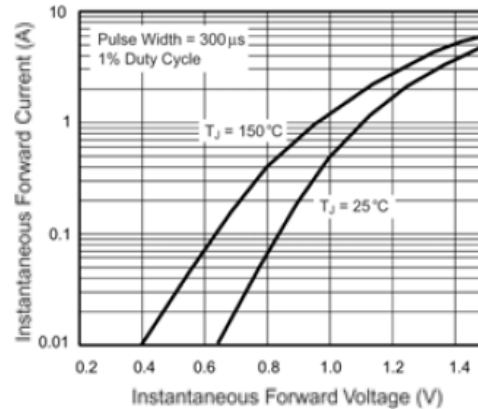


Figure 3. Typical Forward Voltage Characteristics Per Leg

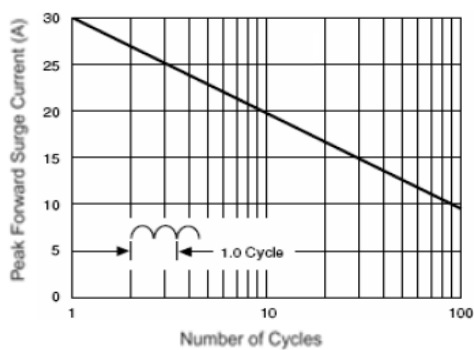


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

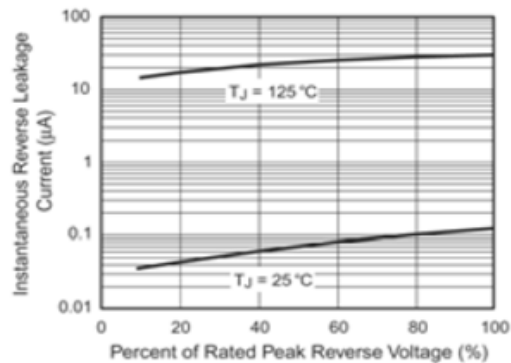
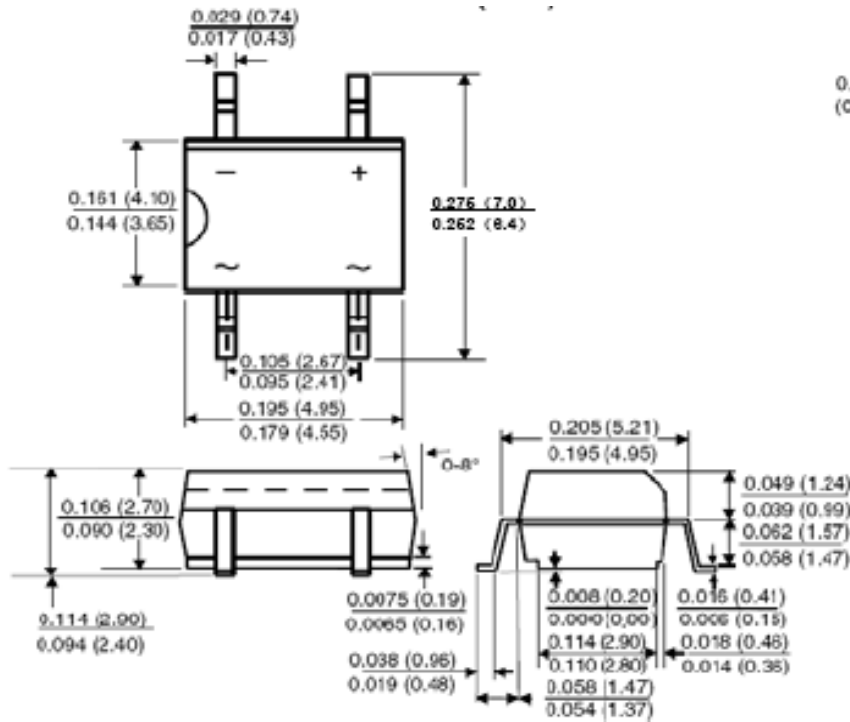


Figure 4. Typical Reverse Leakage Characteristics Per Leg

## Package Outline Dimensions

in inches (millimeters)

TO-269AA(MBS)



### Mounting Pad Layout

