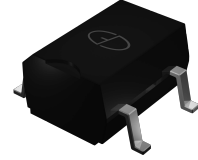


## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- High forward surge capability



MBS

## Mechanical Data

- Case: MBS molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- High temperature soldering guaranteed: 260°C/10 seconds
- Mounting position: Any

## Absolute Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	$V_{RRM}$	100	V
RMS Reverse Voltage	$V_{RMS}$	70	V
DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Output Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave, at $T_J=25^\circ\text{C}$	$I_{FSM}$	80	A
Rating for Fusing ( $t<8.3\text{ms}$ )	$I^2t$	26.56	A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage, at 1A	$V_F$	0.68	V
Maximum Instantaneous Forward Voltage, at 3A		0.85	
Maximum Reverse Current Rated $V_{Rv}$ , at $T_A=25^\circ\text{C}$	$I_R$	0.1	mA
Maximum Reverse Current Rated $V_{Rv}$ , at $T_A=100^\circ\text{C}$		10	
Typical Thermal Resistance <sup>1</sup>	$R_{\theta JA}$	85	$^\circ\text{C/W}$
	$R_{\theta JL}$	20	
Operating Junction Temperature Range	$T_J$	-55 To +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 To +150	$^\circ\text{C}$

Notes:

1. On aluminum substrate P.C.B. with an area of 0.8"×0.8" (20×20mm) mounted on 0.05"×0.05" (1.3×1.3mm) solder pad.

## Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

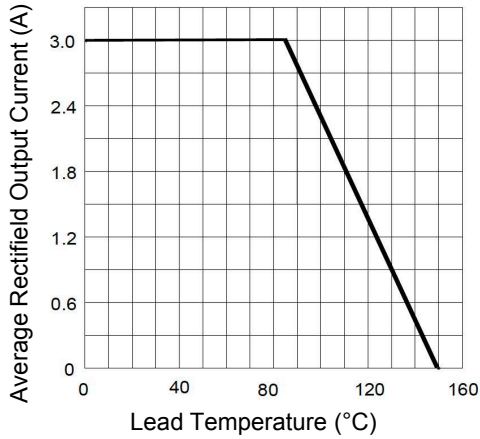


Figure 1. Forward Current Derating Curve

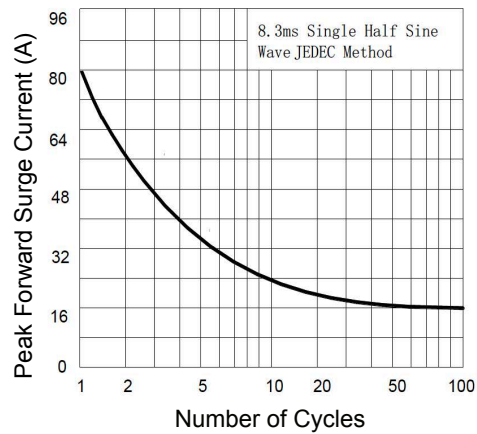


Figure 2. Surge Current Derating Curve

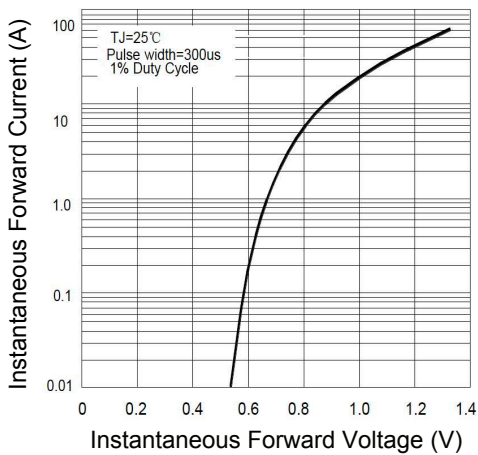


Figure 3. Typical Forward Voltage Characteristic

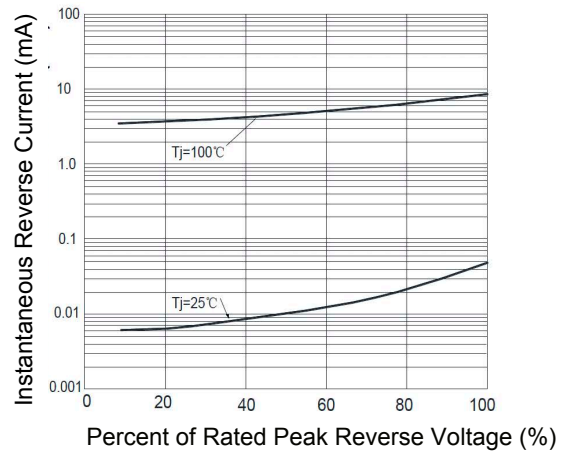
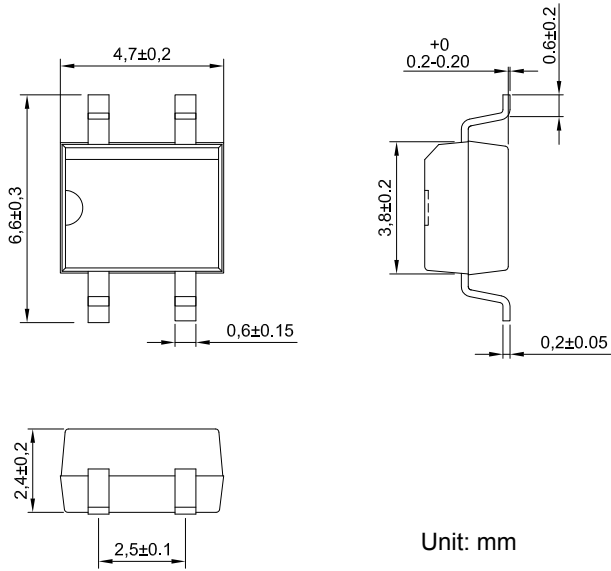
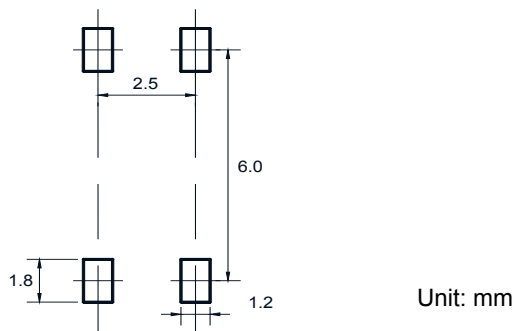


Figure 4. Typical Reverse Characteristics

## Package Outline Dimensions (MBS)



## Recommended Pad Layout



## Order Information

Device	Package	Marking	Carrier	Quantity
GSMB310S	MBS	MB310S	Tape & Reel	3,000pcs / Reel