

# MB6S

## Miniature Glass Passivated Single Phase Surface Mount Bridge Rectifier

Reverse Voltage – 600 V

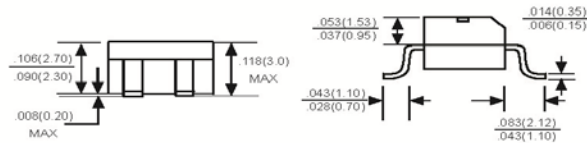
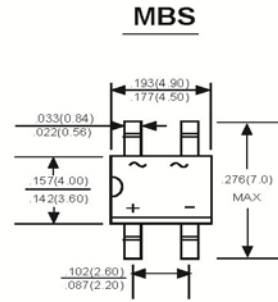
Forward Current – 0.5 A

### Features

- Surge overload rating: 30 amperes peak
- Ideal for printed circuit board
- Low leakage
- Reliable low cost construction utilizing molded
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### Mechanical Data

- **Case:** MBS, molded plastic.
- **Terminals:** Leads solderable per MIL-STD-202, method 208.
- **Mounting position:** Any.
- **Weight:** 0.008 ounce, 0.22 grams.



Dimensions in inches and (millimeters)

### Absolute Maximum Ratings and Characteristics

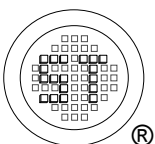
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	MB6S	Units
	Marking	MB6S	-
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Rectified Current See Fig .1 On glass epoxy P.C.B <sup>2)</sup> On aluminum substrate <sup>3)</sup>	$I_{F(AV)}$	0.5 0.8	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	30	A
Maximum Instantaneous Forward Voltage at 0.4 A	$V_F$	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ C$ $T_A = 100^\circ C$	$I_R$	5 100	$\mu A$
Typical Junction Capacitance <sup>1)</sup>	$C_J$	15	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	75	$^\circ C/W$
Operating Junction and Storage Temperature Range	$T_J, T_{stg}$	- 55 to + 150	$^\circ C$

<sup>1)</sup> Measured at 1 MHz and applied  $V_r = 4$  volts.

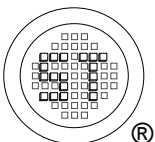
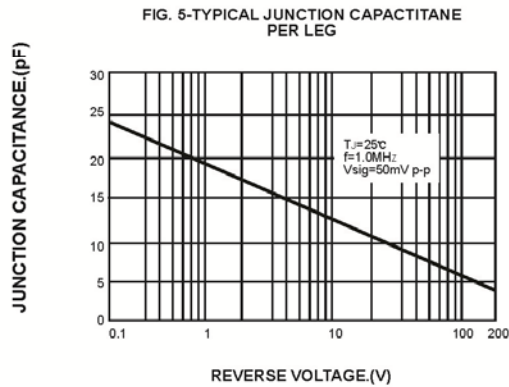
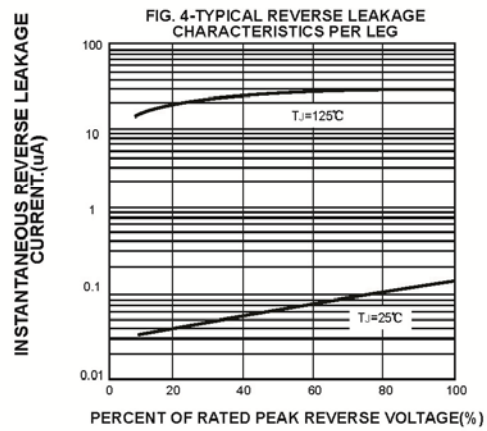
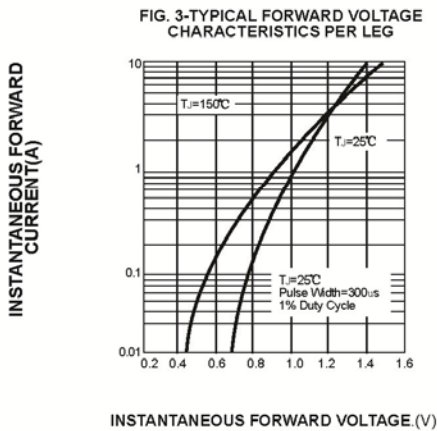
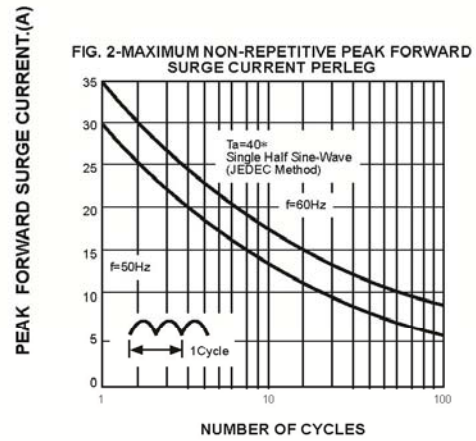
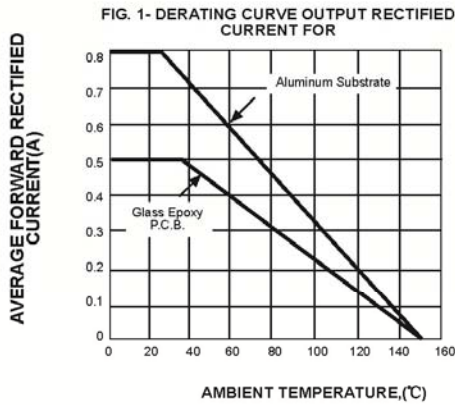
<sup>2)</sup> On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3 mm) pads.

<sup>3)</sup> On aluminum substrate P.C.B. with an area of 0.8 x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad.



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ISO/TS 16949 : 2009 Certificate No. 180713000 | ISO14001 : 2004 Certificate No. 7116 | ISO 9001 : 2008 Certificate No. 50719410 | BS-OHSAS 18001 : 2007 Certificate No. 7116 | IECQ QC 080000 Certificate No. PRC-18P16-148-1