



B1S THRU B10S

MINI SILICON SURFACE MOUNT BRIDGE RECTIFIER

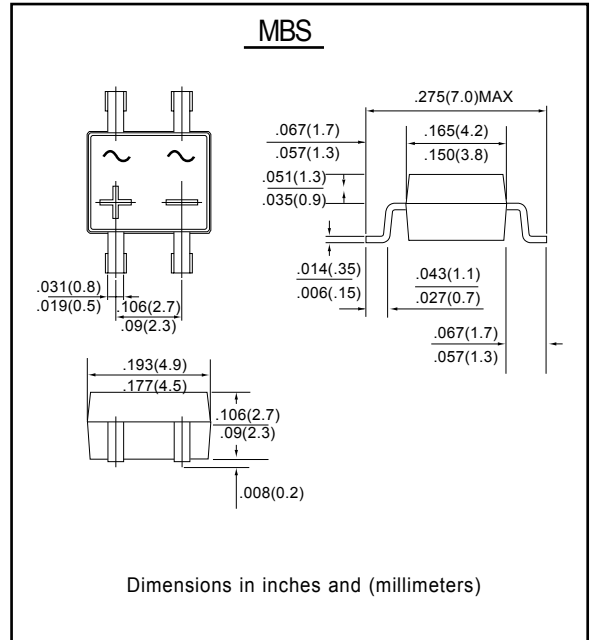
Reverse Voltage - 100 to 1000 Volts Forward Current - 0.8 Ampere

FEATURES

- Surge overload rating - 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Glass passivated device
- Polarity symbols molded on body

MECHANICAL DATA

- Case : MBS, Molded Plastic
- Epoxy : Device has UL flammability classification 94V-0
- Mounting Position : Any
- Weight : 0.22 grams (approx.)
- Marking : Type Number



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| Characteristic | Symbol | B1S | B2S | B4S | B6S | B8S | B10S | Unit | |
|---|--------------------------------------|-------------|-----|-----|-----|-----|------|------|------------------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | | |
| Working Peak Reverse Voltage | V _{RWM} | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| DC Blocking Voltage | V _R | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Average Rectified Output Current (Note 1) @T _A = 40°C | I _O | 0.8 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² t | 10 | | | | | | | A ² s |
| Forward Voltage per element @I _F = 0.8A | V _{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C | I _{RM} | 5.0 500 | | | | | | | μA |
| Typical Junction Capacitance per leg (Note 2) | C _j | 25 | | | | | | | pF |
| Typical Thermal Resistance per leg (Note 1) | R _{θJA} R _{θJL} | 85 20 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -55 to +150 | | | | | | | °C |

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

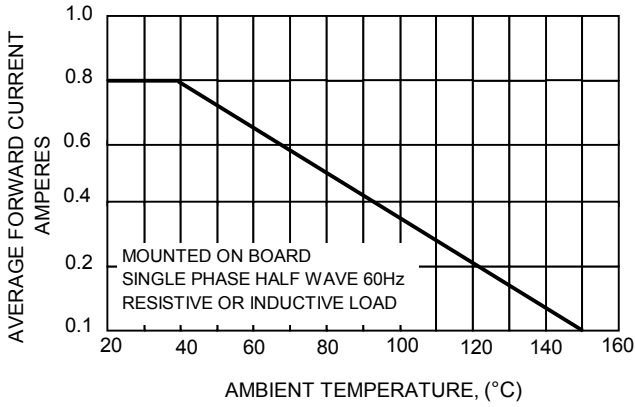


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

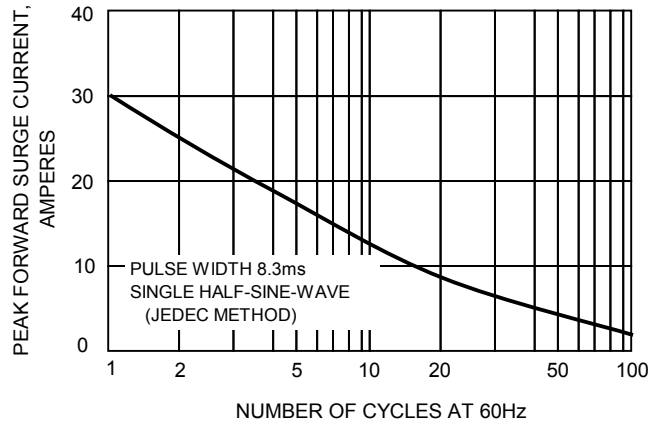


FIG.3-TYPICAL REVERSE CHARACTERISTICS

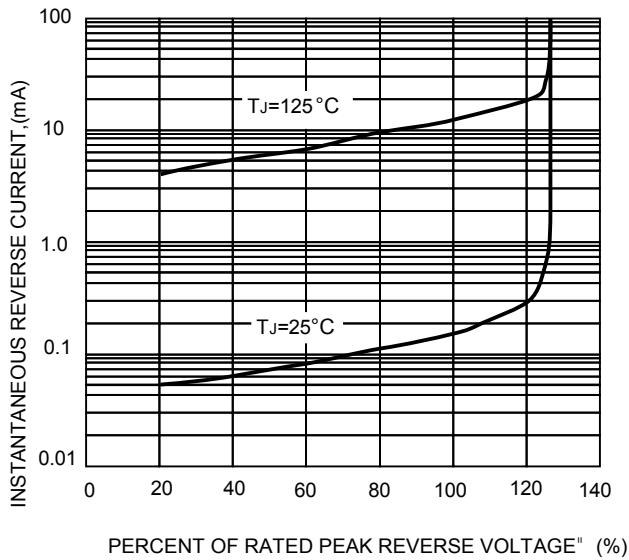


FIG.4-TYPICAL FORWARD CHARACTERISTICS

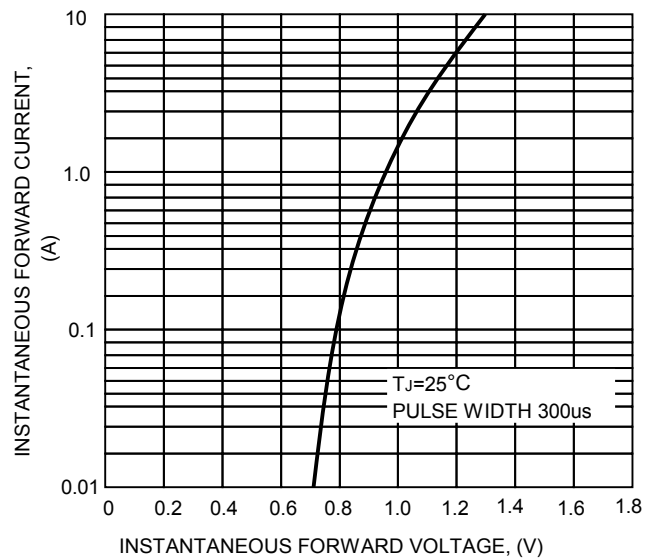


FIG.5-TYPICAL JUNCTION CAPACITANCE

