



Micro Commercial Corp.
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**MB05S
 THRU
 MB10S**

Features

- Surface Mount Package
- Glass Passivated Diode Construction
- Moisture Resistant Epoxy Case
- High Surge Current Capability

**0.5Amp Single Phase
 Glass Passivated
 Bridge Rectifier
 50 to 1000 Volts**

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

| MCC Catalog Number | Device Marking | Maximum Rccurent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|---------------------------------------|---------------------|-----------------------------|
| MB05S | MB05S | 50V | 35V | 50V |
| MB1S | MB1S | 100V | 70V | 100V |
| MB2S | MB2S | 200V | 140V | 200V |
| MB4S | MB4S | 400V | 280V | 400V |
| MB6S | MB6S | 600V | 420V | 600V |
| MB8S | MB8S | 800V | 560V | 800V |
| MB10S | MB10S | 1000V | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

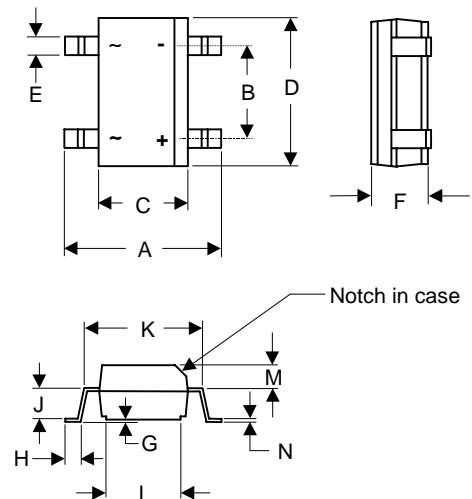
| | | | |
|---|-------------|-----------------|--|
| Average Forward Current | $I_{F(AV)}$ | 0.5A 0.8A | Note1 $T_A = 30^\circ\text{C}$ Note2 $T_A = 30^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V | $I_{FM} = 0.5\text{A};$ $T_A = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5 μA | $T_A = 25^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 25pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

Note1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

Note2. On alum: substrate P.C.B with an rea of 0.8 x 0.8 x 0.25"
 (20 x 20 x 6.4mm) mounte on 0.05 x 0.05 "(13 x 13 mm)
 solder pad.

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 1%

MBS -1



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|------|
| | INC HES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .252 | .272 | 6.40 | 6.91 | |
| B | .095 | .105 | 2.41 | 2.67 | |
| C | 1.45 | .155 | 3.68 | 3.94 | |
| D | .180 | .190 | 4.57 | 4.83 | |
| E | .017 | .029 | 0.45 | 0.75 | |
| F | .090 | .106 | 2.30 | 2.70 | |
| G | .004 | .008 | 0.10 | 0.20 | |
| H | .021 | .023 | 0.53 | 0.58 | |
| J | .055 | .065 | 1.40 | 1.65 | |
| K | ---- | .200 | ---- | 5.08 | |
| L | .107 | .117 | 2.72 | 2.97 | |
| M | .040 | .050 | 1.02 | 1.27 | |
| D | .008 | .014 | 0.15 | 0.35 | |

MB05S thru MB10S

Figure 1
Typical Forward Characteristics

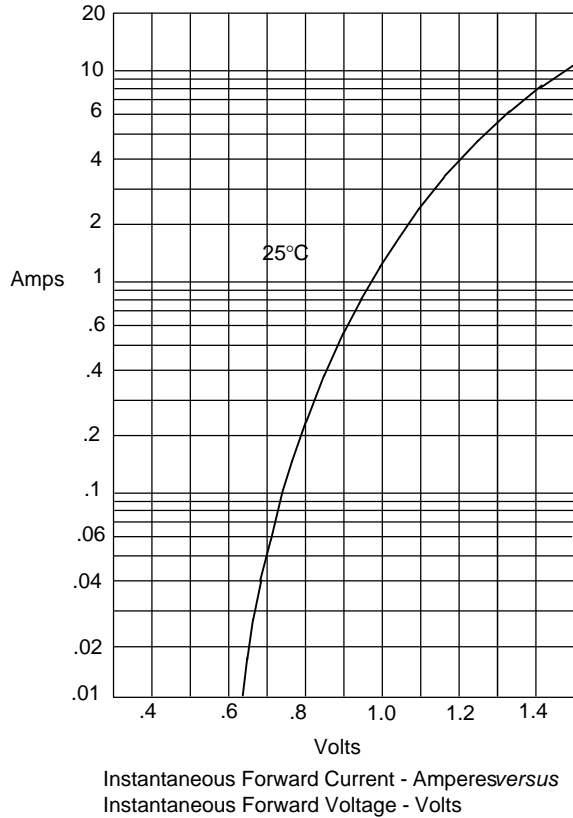


Figure 2
Typical Reverse Characteristics

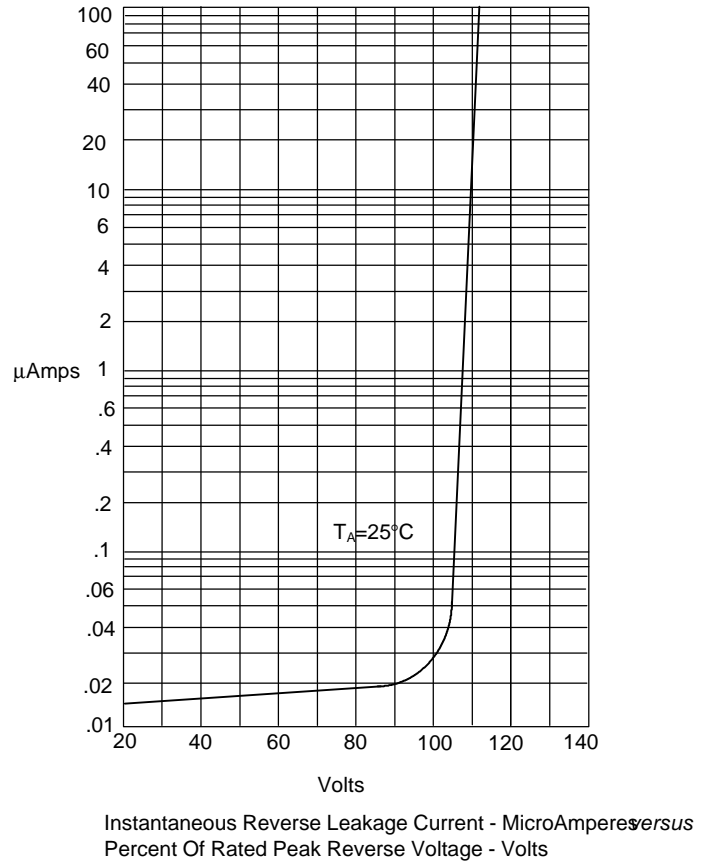


Figure 3
Forward Derating Curve

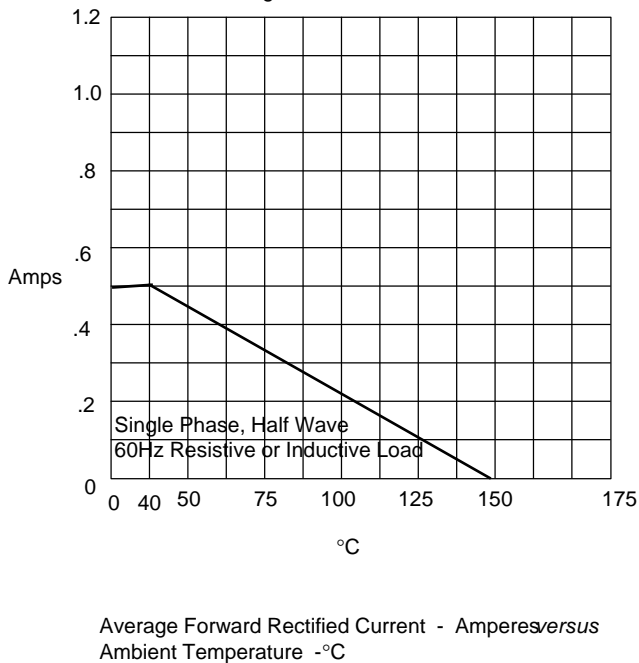


Figure 4
Peak Forward Surge Current

