

**Microsemi Corp.**  
The diode experts



**MB200 thru MB206  
MB207 thru MB213**

SANTA ANA, CA

For more information call:  
(714) 979-8220

**FEATURES**

- Microminiature package.
- Voidless hermetically sealed glass package.
- Triple layer passivation.
- Metallurgically bonded.
- Ultra fast recovery.
- PIV to 215 volts.
- Meet or exceed requirements of MIL-S-19500.

**MAXIMUM RATINGS**

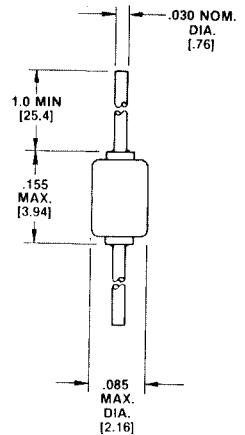
Operating Temperature: -65°C to +175°C.

Storage Temperature: -65°C to +200°C.

\*Power Dissipation: 2 Watts @ 25°C.

\*This rating applies when diodes are mounted on turret terminals (.060" diameter x .375" minimum height) on .5" centers in free air. With fan cooling of at least 250 linear feet per minute air velocity this rating is 3.0 watts at 25°C.

**RECTIFIERS**



**FIGURE 1  
PACKAGE A**

**MECHANICAL CHARACTERISTICS**

CASE: Hermetically sealed hard glass.

LEAD MATERIAL: Tinned copper.

MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

**ELECTRICAL CHARACTERISTICS**

| TYPE  | PEAK INVERSE VOLTAGE (MIN.) PIV | BREAKDOWN VOLTAGE (MIN.) $B_V$ @ 100 $\mu$ A | AVERAGE RECTIFIED CURRENT $I_o$ | FORWARD VOLTAGE DROP (MAX.) $V_F$ | REVERSE CURRENT (MAX.) $I_R$ @ PIV |       | SURGE CURRENT (MAX.) (NOTE 1) $I_F$ (surge) | JUNCTION CAPACITANCE (MAX.) $C_j$ @ V |       | REVERSE RECOVERY TIME (MAX.) (NOTE 2) |
|-------|---------------------------------|--|---------------------------------|-----------------------------------|------------------------------------|-------|---|---------------------------------------|-------|---------------------------------------|
|       |                                 |  |                                 |                                   | $\mu$ A                            | AMPS  |   | 0V                                    | -10V  |                                       |
|       | VOLTS                           | VOLTS  | AMPS                            | VOLTS                             | 25°C                               | 100°C | AMPS  | pF                                    | n sec |                                       |
|       |                                 |  | $T_A 55^\circ C$                |                                   |                                    |       |   |                                       |       |                                       |
| MB200 | 40                              | 55   | 2.0                             | 1.0V                              | .5                                 | 100   | 25  | 35                                    | 20    | 20                                    |
| MB201 | 65                              | 85   | 2.0                             | @                                 | .5                                 | 100   | 25  | 35                                    | 20    | 20                                    |
| MB202 | 90                              | 110  | 2.0                             | 1.667 Adc                         | .5                                 | 100   | 25  | 35                                    | 20    | 20                                    |
| MB204 | 135                             | 165  | 2.0                             | (250 msec pulse)                  | .5                                 | 100   | 25  | 35                                    | 20    | 20                                    |
| MB206 | 185                             | 215  | 2.0                             |                                   | 1.5                                | 200   | 25  | 35                                    | 20    | 20                                    |
| MB207 | 40                              | 55   | 2.0                             | 1.0V                              | 1.0                                | 200   | 25  | 25                                    | 15    | 20                                    |
| MB208 | 65                              | 85   | 2.0                             | @                                 | 1.0                                | 200   | 25  | 25                                    | 15    | 20                                    |
| MB209 | 90                              | 110  | 2.0                             | 1.25 Adc                          | 1.0                                | 200   | 25  | 25                                    | 15    | 20                                    |
| MB211 | 135                             | 165  | 2.0                             | (250 msec pulse)                  | 1.0                                | 200   | 25  | 25                                    | 15    | 20                                    |
| MB213 | 185                             | 215  | 2.0                             |                                   | 3.0                                | 400   | 25  | 25                                    | 15    | 20                                    |

NOTE 1: Single cycle 8.3 msec surge

NOTE 2:  $I_F = 1A$ ,  $I_R = 1.0A$ , recover to .5A

# MB200 thru MB206 MB207 thru MB213

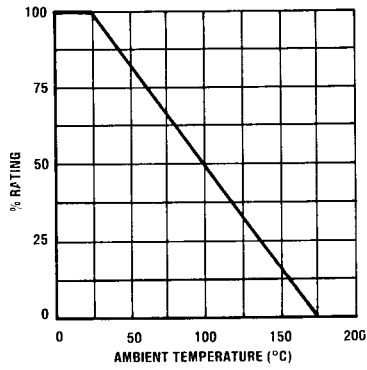


FIGURE 2  
TEMPERATURE  
DERATING CURVE

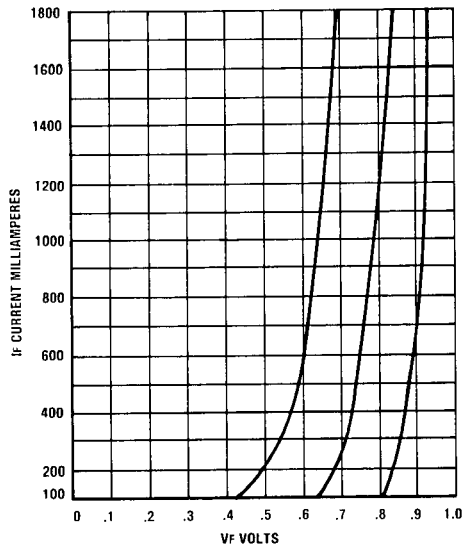


FIGURE 3  
FORWARD CONDUCTANCE CURVE\*\*

\*\*Special band spread requirements can be supplied upon request.