

**Microsemi Corp.**  
The diode experts



**1N5802  
thru  
1N5806**



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 150 VOLTS
- JAN S/TX/TXV TYPES AVAILABLE PER MIL-S-19500/477

**MAXIMUM RATINGS**

Operating Temperature: -55°C to +200°C.  
Storage Temperature: -55°C to +200°C.  
Surge: Pulse 8.3ms, 35 A

**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 @ -10 V | REVERSE RECOVERY TIME (MAX.) (NOTE 2) |
|--------|---------------------------------|--|---------------------------------|-----------------------------------|--------|------|------------------------------------|--------------|---|---------------------------------------|---------------------------------------|
|        | VOLTS                           | VOLTS  | AMPS                            | VOLTS                             |        |      | $\mu$ A                            |              | AMPS  | pF                                    | n sec                                 |
|        |                                 |  | $T_A = 55^\circ\text{C}$        | 25°C                              | 100°C  | 25°C | 100°C                              |              |   |                                       |                                       |
| 1N5802 | 50                              | 55   | 2.5 @                           | .875 @                            | .80 @  | 1.0  | 1.0                                | 35           | 20  | 25                                    |                                       |
| 1N5803 | 75                              | 80   | $T_L =$                         | 1.0 Adc                           | 2.5Adc | 1.0  | 50 @                               | single cycle | typ.  | 25                                    |                                       |
| 1N5804 | 100                             | 110  | 75°C                            | 250msec pulse                     | @ 75°C | 1.0  | 75°C                               | 8.3msec      |   | 25                                    |                                       |
| 1N5805 | 125                             | 135  | (L = 3/16")                     |                                   |        | 1.0  |                                    |              |   | 25                                    |                                       |
| 1N5806 | 150                             | 160  |                                 |                                   |        | 1.0  |                                    |              |   | 25                                    |                                       |

NOTE 1:  $T_A = 55^\circ\text{C}$  @ rated  $I_o$ , 10-8.3 msec surges

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

**ULTRA FAST  
MILITARY  
RECTIFIERS**

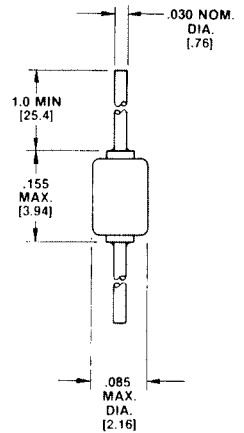


FIGURE 1  
PACKAGE A

**MECHANICAL CHARACTERISTICS**

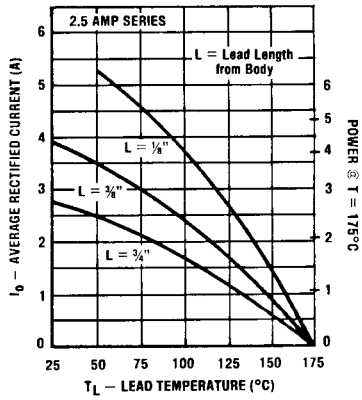
CASE: Hermetically sealed glass case.

LEAD MATERIAL: Tinned copper.

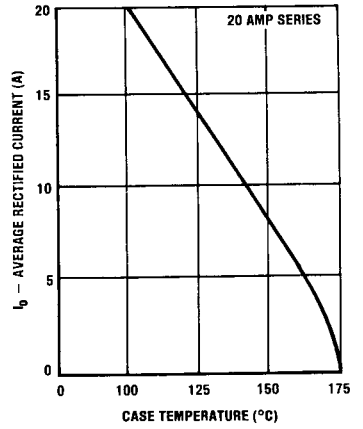
MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

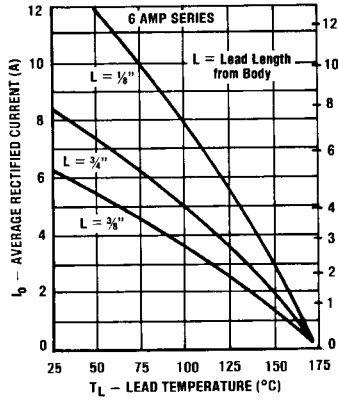
# 1N5802 thru 1N5806



**FIGURE 2**  
OUTPUT CURRENT vs. LEAD TEMP.



**FIGURE 3**  
OUTPUT CURRENT vs. CASE TEMP.



**FIGURE 4**  
OUTPUT CURRENT vs. LEAD TEMP.