

**Microsemi Corp.**  
The diode experts



**MT5100-MT5103  
MT5139, MT5140,  
MT2060, MT2060A  
MT2061, MT2061A**

SANTA ANA, CA

For more information call:  
(714) 979-8220

## FEATURES

- Exhibits leakage currents approaching the theoretical bulk characteristics of silicon.
- Oxide and glass junctions passivated for long-term stable device performance.
- Voidless hermetically sealed glass package.
- Exceeds MIL-S-19500 requirements.

## MAXIMUM RATINGS

Storage Temperature: -65°C to +260°C.  
Operating Temperature: -65°C to 260°C.

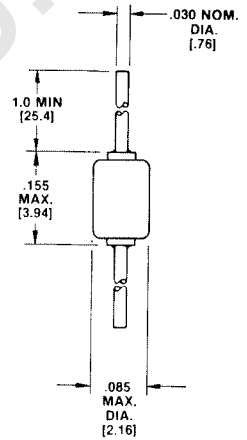
## ELECTRICAL CHARACTERISTICS

| TYPE NUMBER | MIN BV @ 100µA @ 25°C VOLTS | Vr VOLTS | MAX. Ir @ Vr @ 25°C PICO AMPS | MAX. Ir @ Vr @ 150°C NANO AMPS | MAX. Ir @ Vr @ 200°C MICRO AMPS | I @ 1.2V MA | MAX. Cap. @ 0V PF | MAX. Cap. @ 10V PF | Pkg. |
|-------------|-----------------------------|----------|-------------------------------|--------------------------------|---------------------------------|-------------|-------------------|--------------------|------|
| MT 5100     | 75                          | 20       | 10                            | 50                             | 1                               | 100         | 6                 | 3                  | B    |
| MT 5101     | 75                          | 20       | 20                            | 100                            | 2                               | 100         | 6                 | 3                  | B    |
| MT 5102     | 75                          | 20       | 10                            | 50                             | 1                               | 80          | 6                 | 3                  | B    |
| MT 5103     | 75                          | 20       | 20                            | 100                            | 2                               | 80          | 6                 | 3                  | B    |
| MT 5139     | 60                          | 50       | 50                            | 75                             | 1                               | 100         | 6                 | 3                  | B    |
| MT 5140     | 110                         | 100      | 125                           | 125                            | 2                               | 100         | 6                 | 3                  | B    |
| MT2060      | 600                         | 500      | 2000                          | 6000                           | 40                              | 400         | 10                | 5                  | B    |
| MT2060A     | 600                         | 500      | 2000                          | 6000                           | 40                              | 400         | 16                | 8                  | A    |
| MT2061      | 600                         | 500      | 1000                          | 3000                           | 20                              | 400         | 10                | 5                  | B    |
| MT2061A     | 600                         | 500      | 1000                          | 3000                           | 20                              | 400         | 16                | 8                  | A    |

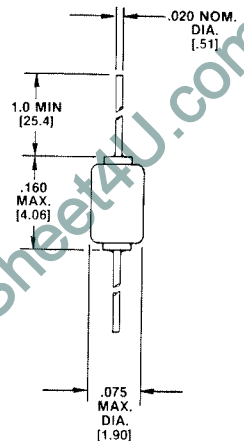
## MECHANICAL CHARACTERISTICS

Case: Hermetically sealed glass case.  
Lead Material: Tinned copper. (A package) (Copper Clad Steel – B package)  
Marking: Body painted, alpha numeric.  
Polarity: Cathode band.

## PICO AMP LOW LEAKAGE DIODES

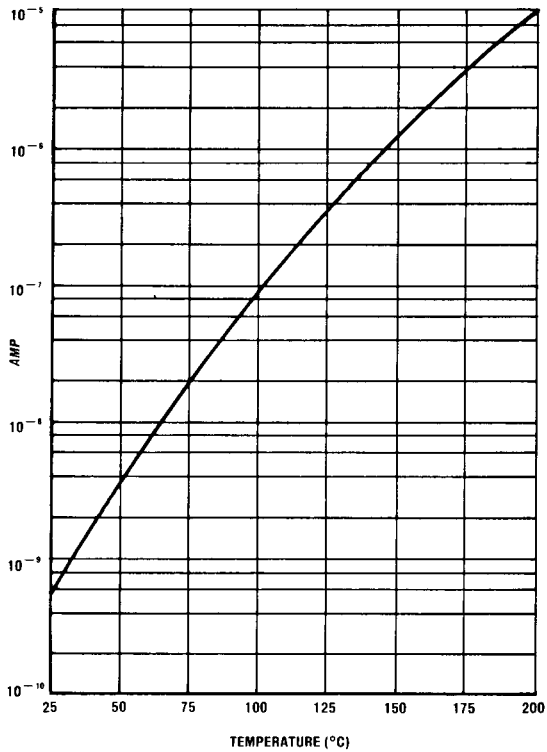


PACKAGE "A"

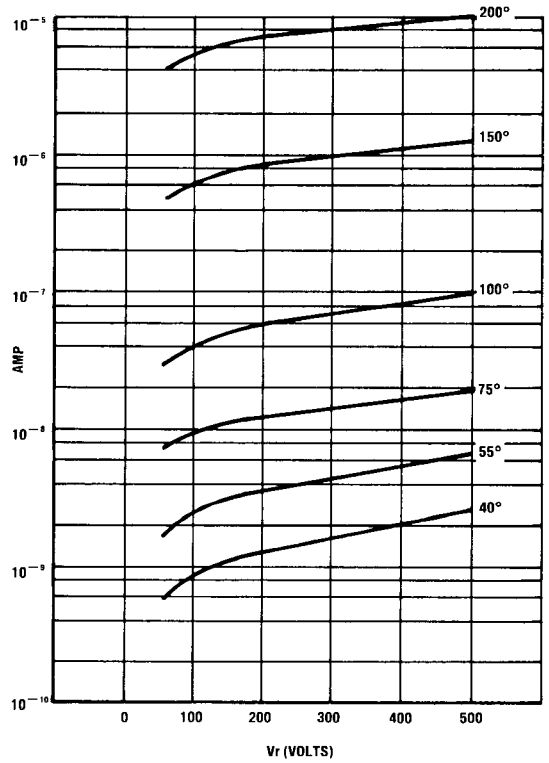


PACKAGE "B"

**MT5100 - MT5103  
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 MT2060, MT2060A  
 MT2061, MT2061A**



**FIGURE 2**  
**MAXIMUM Ir LIMIT @ 500V CURVE**  
 (MT 2060, MT 2060A, MT 2061, MT 2061A)



**FIGURE 3**  
**MAXIMUM Ir CURVES**  
 (as applicable to maximum Va)