

**Microsemi Corp.**  
The diode experts



**1N5415  
thru  
1N5420**



SANTA ANA, CA  
For more information call:  
(714) 979-8220

**FAST  
RECTIFIERS**

**FEATURES**

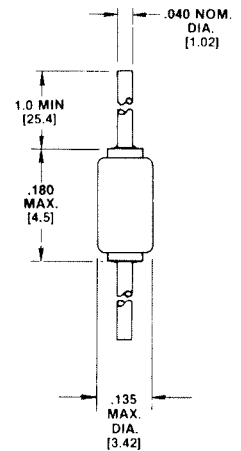
- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- FAST RECOVERY
- PIV TO 600 VOLTS
- JAN/JANS/TX/TXV TYPES AVAILABLE PER MIL-S-19500/411

**MAXIMUM RATINGS**

Operating Temperature: -65°C to +175°C  
Storage Temperature: -65°C to +200°C

**ELECTRICAL CHARACTERISTICS**

| TYPE                | V <sub>RWM</sub> | MINIMUM<br>REVERSE<br>BREAKDOWN<br>VOLTAGE<br>@ 50 $\mu$ A | FORWARD<br>VOLTAGE<br>V <sub>F</sub><br>@ 8Adc |          | MAXIMUM<br>REVERSE<br>CURRENT<br>@ V <sub>RWM</sub> |            | MAXIMUM<br>REVERSE<br>RECOVERY<br>TIME t <sub>rr</sub> @cc | AVERAGE RECTIFIED<br>CURRENT AMPS |       |
|---------------------|------------------|--|--|----------|---|------------|--|-----------------------------------|-------|
|                     |                  |  | MIN  | MAX      | 25°C  | 100°C      |  | 55°C                              | 100°C |
|                     |                  |  |  |          |   |            |  |                                   |       |
| J, JTX, JTXV 1N5415 | 50V              | 55V  | 0.6V(pk)                                       | 1.5V(pk) |   |            | 15   | 3.0                               | 2.0   |
| J, JTX, JTXV 1N5416 | 100V             | 110V   |  |          |   |            | 01   | 3.0                               | 2.0   |
| J, JTX, JTXV 1N5417 | 200V             | 220V   |  |          |   |            | 50   | 3.0                               | 2.0   |
| J, JTX, JTXV 1N5418 | 400V             | 440V   |  |          | 1.0 $\mu$ A   | 20 $\mu$ A | 150  | 3.0                               | 2.0   |
| J, JTX, JTXV 1N5419 | 500V             | 550V   |  |          |   |            | 150  | 3.0                               | 2.0   |
| J, JTX, JTXV 1N5420 | 600V             | 660V   |  |          |   |            | 250  | 3.0                               | 2.0   |



**FIGURE 1  
PACKAGE E**

**MECHANICAL  
CHARACTERISTICS**

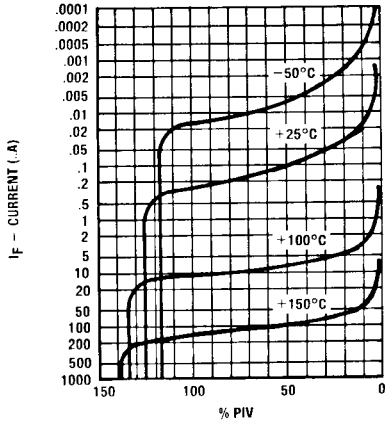
CASE: Hermetically sealed glass case.

LEAD MATERIAL: Silver clad copper.

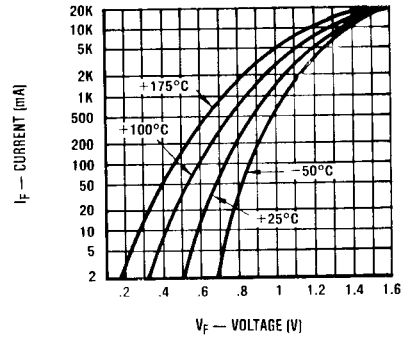
MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

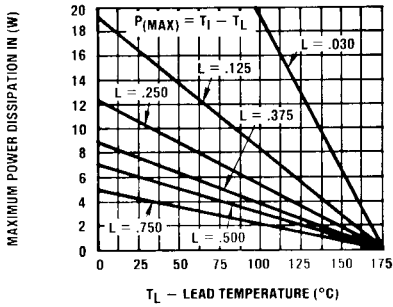
# 1N5415 - 1N5420



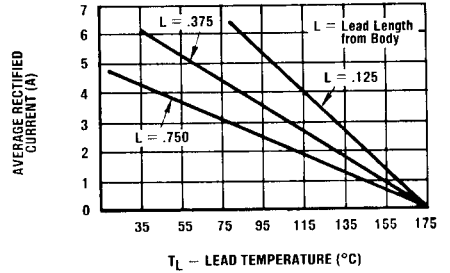
**FIGURE 2**  
TYPICAL REVERSE CURRENT vs. PIV



**FIGURE 3**  
TYPICAL FORWARD CURRENT  
vs. FORWARD VOLTAGE



**FIGURE 4**  
MAXIMUM POWER  
vs. LEAD TEMPERATURE



**FIGURE 5**  
MAXIMUM CURRENT vs. LEAD TEMPERATURE