

Microsemi Corp.
The diode experts



**1N3643 thru 1N3647
1N4254 thru 1N4257
1N5181 thru 1N5184**

SANTA ANA, CA

For more information call:
(714) 979-8220

FEATURES

- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- LOWEST REVERSE LEAKAGE AVAILABLE
- LOWEST THERMAL RESISTANCE AVAILABLE
- MAXIMUM BREAKDOWN VOLTAGE PER DIE
- ABSOLUTE HIGH VOLTAGE / HIGH TEMPERATURE STABILITY
- MEET OR EXCEED REQUIREMENTS OF MIL-S-19500/389 (IN 5181 — IN 5184).
- 1N3644 THRU 1N3647 JAN, JANTX TYPES AVAILABLE PER MIL-S-19500/279

MAXIMUM RATINGS

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

ELECTRICAL CHARACTERISTICS

| TYPE | WORKING PEAK REVERSE VOLTAGE V _{RRM} | AVERAGE RECTIFIED CURRENT I _o | | FORWARD VOLTAGE (MAX.) V _F (SEE NOTES) | REVERSE CURRENT (MAX.) I _R @ V _{RRM} | | | | SURGE CURRENT (MAX.) AMPS |
|------------|--|---|------|---|---|------|------|-------|------------------------------|
| | | mA | | | μA | | | | |
| | | VOLTS | 55°C | | 100°C | 25°C | 55°C | 125°C | |
| 1N3643 | 1000 | 250 | 150 | 5.0(1) | 5 | — | — | — | 14 |
| JAN 1N3644 | 1500 | 250 | 150 | 5.0(1) | 5 | — | — | — | 14 |
| JAN 1N3645 | 2000 | 250 | 150 | 5.0(1) | 5 | — | — | — | 14 |
| JAN 1N3646 | 2500 | 250 | 150 | 5.0(1) | 5 | — | — | — | 14 |
| JAN 1N3647 | 3000 | 250 | 150 | 5.0(1) | 5 | — | — | — | 14 |
| 1N4254 | 1500 | 250 | 150 | 3.5(2) | 1 | — | 20 | — | 10 |
| 1N4255 | 2000 | 250 | 150 | 3.5(2) | 1 | — | 20 | — | 10 |
| 1N4256 | 2500 | 250 | 150 | 3.5(2) | 1 | — | 20 | — | 10 |
| 1N4257 | 3000 | 250 | 150 | 3.5(2) | 1 | — | 20 | — | 10 |
| 1N5181 | 4000 | 100 | 60 | 10(2) | — | 5 | — | 1000 | 4 |
| 1N5182 | 5000 | 100 | 60 | 10(2) | — | 5 | — | 1000 | 4 |
| 1N5183 | 7500 | 100 | 60 | 10(2) | — | 5 | — | 1000 | 4 |
| 1N5184 | 10,000 | 100 | 60 | 10(2) | — | 5 | — | 1000 | 4 |

NOTE 1: V_F @ 250mA

NOTE 2: V_F @ 100mA

HIGH VOLTAGE RECTIFIERS

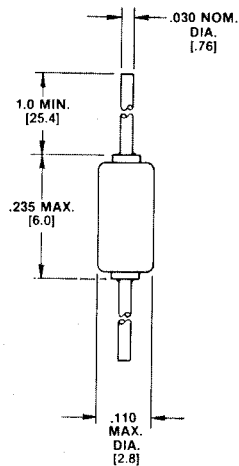


FIGURE 1
Package S

MECHANICAL CHARACTERISTICS

- CASE: Hermetically sealed hard glass.
- LEAD MATERIAL: Tinned copper.
- MARKING: Body painted, alpha numeric.
- POLARITY: Cathode band.

1N3643 thru 1N3647
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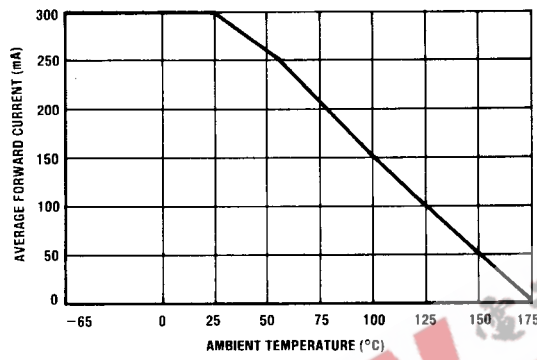


FIGURE 2
HVE/HVE 10-30/1N3643-47

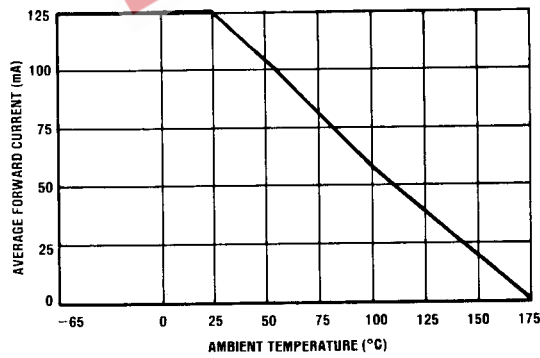


FIGURE 3
HVE/HVE 40-100/1N5181-84