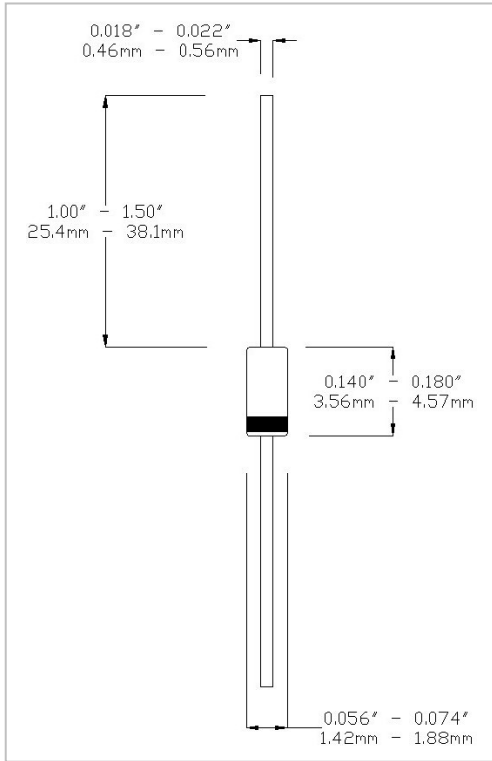


# 1N4938-1

## FEATURES

- 1N4938-1 AVAILABLE IN JAN, JANTX, AND JANTXV PER MIL-PRF-19500/169
- SWITCHING DIODE
- METALLURGICALLY BONDED
- HERMETICALLY SEALED
- DOUBLE PLUG CONSTRUCTION



## MAXIMUM RATINGS AT 25 °C

|                              |   |
|------------------------------|---|
| Operating Temperature:       | -65°C to +175°C                         |
| Storage Temperature:         | -65°C to +175°C                         |
| Surge Current A, sine, 1uS:  | 2.0A                                    |
| Surge Current B, sine, 1S:   | 0.5A                                    |
| Total Power Dissipation:     | 500mW                                   |
| Operating Current:           | 100mA, T <sub>A</sub> = +25°C           |
| Derating Factor:             | 0.667mA/°C above T <sub>A</sub> = +25°C |
| D.C. Reverse Voltage (VRWM): | 175V                                    |

## DC ELECTRICAL CHARACTERISTICS

| V <sub>F</sub> |                   |       |       | I <sub>R</sub> |        |        |        | V <sub>BR</sub> |                   |       |       |
|----------------|-------------------|-------|-------|----------------|--------|--------|--------|-----------------|-------------------|-------|-------|
| Ambient (°C)   | I <sub>F</sub> mA | Min V | Max V | Ambient (°C)   | V (dc) | Min μA | Max μA | Ambient (°C)    | I <sub>R</sub> μA | Min V | Max V |
| 25             | 100               | -     | 1.0   | 25             | 175    | -      | 0.1    | 25              | 100               | 200   | -     |
| -55            | 100               | -     | 1.2   | 150            | 175    | -      | 100    |                 |                   |       |       |

## DESIGN DATA

**Case:** Hermetically sealed glass package per MIL-PRF-19500/169 DO-35 outline

**Lead Material:** Copper clad steel

**Lead Finish:** Tin/Lead

**Thermal Resistance (R<sub>θJL</sub>):** 250°C/W maximum at L=.375"

**Thermal Impedance (Z<sub>θJX</sub>):** 70°C/W maximum

**Marking:** Alpha numeric.

**Polarity:** Cathode end is banded.

## AC ELECTRICAL CHARACTERISTICS AT 25°C

|  | Symbol | Min | Max |
|--|--------|-----|-----|
| Capacitance @ 0V   | pF     | -   | 5   |
| T <sub>RR</sub> @ I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>Rec</sub> =3mA. | nsec   | -   | 50  |



WWW.MICROSEMI.COM

IRELAND - GORT ROAD, ENNIS, CO. CLARE

PHONE: +353 65 6840044

TOLL FREE: +186 62 702434

FAX: +353 65 6822298

U.S.A. DOMESTIC SALES CONTACT

PHONE: (617) 926 0404

TOLL FREE: 1 800 666 2999