

Silicon Switching Diode

Rev. V1

Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/116
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction



Maximum Ratings

Operating & Storage Temperature: -65°C to $+175^{\circ}\text{C}$
 Operating Current: 200 mA @ $T_A = +75^{\circ}\text{C}$
 Derating Factor: 1.14 mA/ $^{\circ}\text{C}$ above $T_A = +25^{\circ}\text{C}$
 Surge Current A: 2.0 A, sinewave, $P_w = 8.3$ ms
 Surge Current B: 0.704 A square, $P_w = 8.3$ ms
 DC Reverse Voltage (V_{RWM}): 75 V

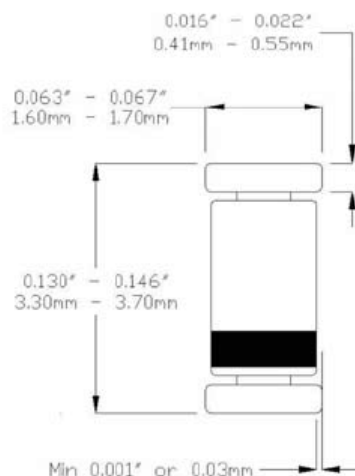
DC Electrical Characteristics

| VF | | | | IR | | | | VBR | | | |
|--------------------------------|-------|--------|--------|--------------------------------|--------|--------|--------|--------------------------------|-------|--------|--------|
| Ambient ($^{\circ}\text{C}$) | IF mA | Min. V | Max. V | Ambient ($^{\circ}\text{C}$) | V (dc) | Min. A | Max. A | Ambient ($^{\circ}\text{C}$) | IR mA | Min. V | Max. V |
| 25 | 10 | — | 0.8 | 25 | 20 | — | 0.025 | 25 | 100 | 100 | 25 |
| 25 | 100 | — | 1.2 | 25 | 75 | — | 0.500 | | | | |
| 150 | 10 | — | 0.8 | 150 | 20 | — | 35.0 | | | | |
| -55 | 100 | — | 1.3 | 150 | 75 | — | 75.0 | | | | |

AC Electrical Characteristics @ 25 $^{\circ}\text{C}$

| Parameter | Symbol | Maximum |
|--------------------------------------------------|--------|---------|
| Capacitance @ 0 V | pF | 4 |
| Capacitance @ 1.5 V | pF | 2.8 |
| T_{RR} @ $I_F = I_R = 10$ mA, $I_{REC} = 1$ mA | nsec | 5 |
| T_{FR} @ IF = 50 mA | nsec | 20 |
| V_{FR} @ IF = 50 mA | V(pk) | 5 |

Outline Drawing



LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/116, DO - 213AA

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JEC}$): 100 °C/W maximum

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 70 °C/W maximum

POLARITY: Cathode end is banded.

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