

Silicon Switching Diodes

1N914 & 1N4148-1



Features

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

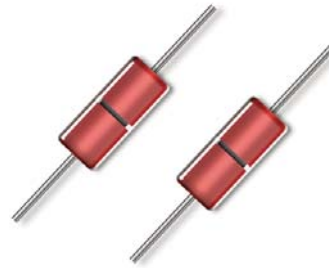
Maximum Ratings

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

Operating Current: 200 mA @ $T_A = +25^\circ\text{C}$

Derating Factor: 1.14 mA/°C above $T_A = +25^\circ\text{C}$

Surge Current A: 2A, sinewave, $P_W = 8.3$ ms

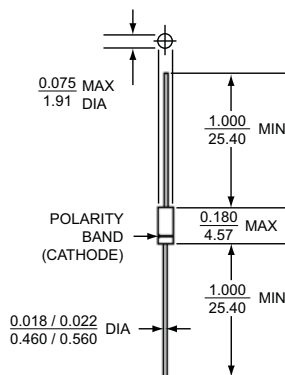


Electrical Specifications @ +25 °C (Unless Otherwise Specified)

| JEDEC TYPE Number | V_{BR} @ 100 μA | V_{RWM} | I_O | V_{f1} $I_F = 10$ mA | V_{f2} $I_F = 50$ mA | T_{rr} (Note 1) | I_{R1} @ 20 Vdc | I_{R2} @ 75 Vdc | I_{R3} @ 20 Vdc $T_A = 150^\circ\text{C}$ | I_{R4} @ 75 Vdc $T_A = 150^\circ\text{C}$ | Capacitance @ 0V | Capacitance @ 1.5 V |
|-------------------------|---------------------------------|------------|-------|---------------------------|---------------------------|----------------------|----------------------|----------------------|---|---|---------------------|------------------------|
| | Volts | Volts (pk) | mA | Vdc | Vdc | nsec | nA | μA | μA | μA | pF | pF |
| 1N914 | 100 | 75 | 75 | 0.8 | 1.2 | 5 | 25 | 0.5 | 35 | 75 | 4.0 | 2.8 |
| 1N4148-1 | 100 | 75 | 200 | 0.8 | 1.2 | 5 | 35 | 0.5 | 35 | 75 | 4.0 | 2.8 |

Note 1: $I_F = I_R = 10$ mA, $R_L = 100$ ohms.

Outline Drawing



All dimensions in $\frac{\text{INCH}}{\text{mm}}$

LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/116, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

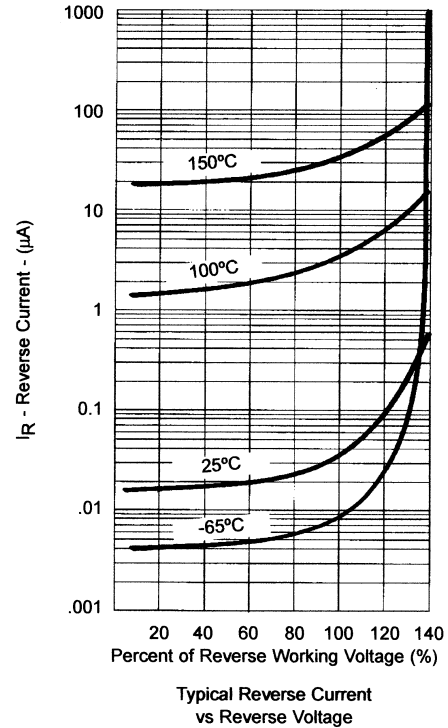
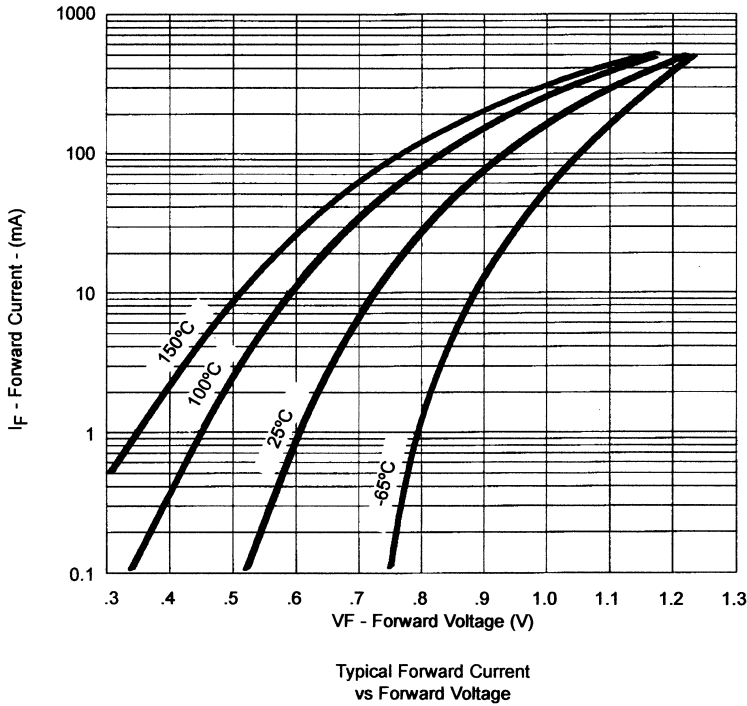
THERMAL RESISTANCE: ($R_{\theta JL}$): 250 °C/W maximum at $L = 0.375$ in

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

POLARITY: Cathode end is banded.



Graphs



NOTE : All temperatures shown on graphs are junction temperatures

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