

1N4454 & 1N4454-1



Silicon Switching Diode

Rev. V1

Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/144
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

Maximum Ratings

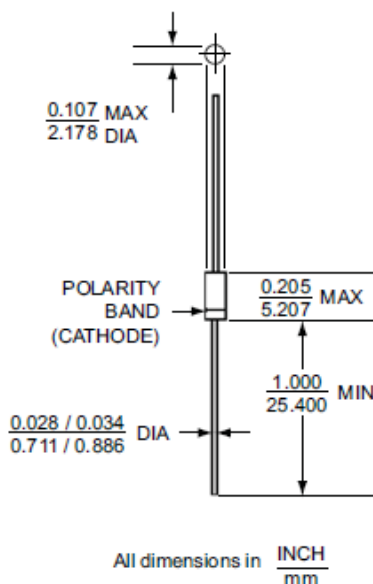
Operating & Storage Temperature: -55°C to $+175^{\circ}\text{C}$
Operating Current: 200 mA @ $T_A = +75^{\circ}\text{C}$
Derating: 2 mA DC/ $^{\circ}\text{C}$ above $T_L = +75^{\circ}\text{C}$ @ $L = 3/8"$
Surge Current A: 2 A (pk) $t_P = 8.3$ ms, $V_{RM} = 0$
Surge Current B: 4 A (pk) $t_P = 1$ μs , $V_{RM} = 0$



Electrical Specifications @ $+25^{\circ}\text{C}$ (unless otherwise Specified)

| V_{BR} @ 5 μA | V_{RWM} | I_0 | V_{F1} @ $I_F = 10$ mA | V_{F2} @ $I_F = 10$ mA $T_A = 150^{\circ}\text{C}$ | t_{rr} | I_{R1} @ 50 V dc | I_{R2} @ 50 V $T_A = 150^{\circ}\text{C}$ | Capacitance @ 0 V |
|-------------------------------|------------|-------|-----------------------------|--|----------|-----------------------|--|----------------------|
| Volts | Volts (pk) | mA | V dc | V dc | n sec | μA | μA | pF |
| 75 | 50 | 200 | 0.8 | 0.7 | 4 | 0.1 | 100 | 2 |

Outline



LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/144, 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.

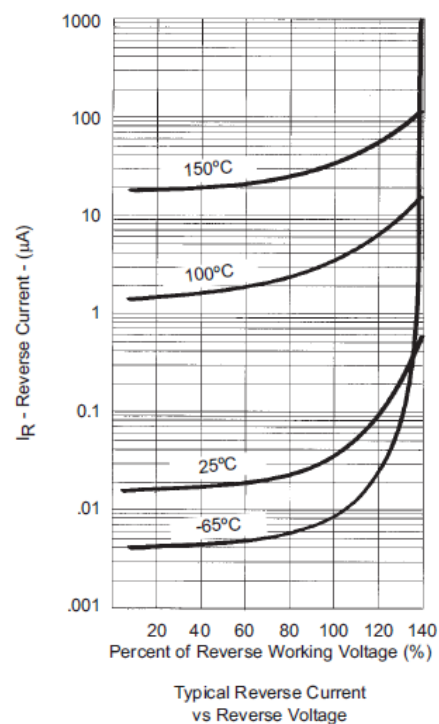
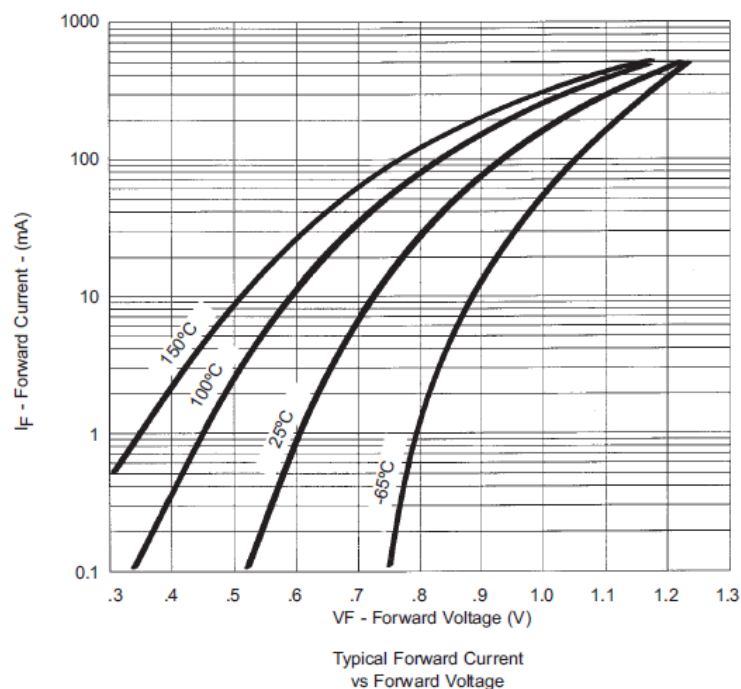
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Graphs



NOTE: All temperatures shown on graphs are junction temperatures.

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