1N3600, 1N4150 & 1N4150-1



Silicon Switching Diode

Rev. V1

Features

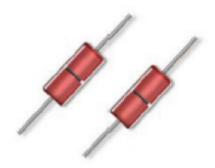
- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/231
- Metallurgically Bonded
- · Hermetically Sealed
- Double Plug Construction

Maximum Ratings

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

Operating Current: 300 mA @ T_A = +25°C

Derating: 2 mA DC/°C above T_L = +75°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 μ s, V_{RM} = 0



Electrical Specifications @ +25°C (unless otherwise Specified)

| TYPE# | V _{BR} I _R = 10 μA | V_{RWM} | I _R 1 V _R = 50 Vdc T _A = 25°C | I _R 2 V _R = 50 Vdc T _A =150°C | C I _R = 0; f = 1 MHz ac signal = 50 mV (p-P) | Trr $I_F = I_R = 10 \text{ to } 100 \text{ mA dc}$ $R_L = 100 \Omega$ |
|------------|---|-----------|--|--|---|---|
| | V dc | V (pk) | μ A dc | μ A dc | pF | ns |
| 1N3600 | 75 | 50 | 0.1 | 100 | 2.5 | 4.0 |
| 1N4150, -1 | 75 | 50 | 0.1 | 100 | 2.5 | 4.0 |

Forward Voltage Limits - All Types

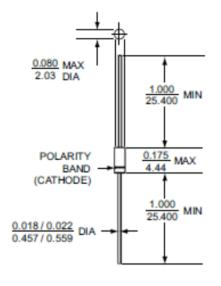
| Limits | V _F 1 I _F = 1 mA dc | V _F 2 I _F = 10 mA dc | V _F 3 I _F = 50 mA dc (Pulsed) | V _F 4 I _F = 100 mA dc (Pulsed) | V_F5 $I_F = 200 \text{ mA dc}$ (Pulsed) |
|---------|--|---|---|--|---|
| | V dc | V dc | V dc | V dc | V dc |
| minimum | 0.540 | 0.660 | 0.760 | 0.820 | 0.870 |
| maximum | 0.620 | 0.740 | 0.860 | 0.920 | 1.000 |



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Outline



All dimensions in INCH

LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/231, DO - 35

LEAD MATERIAL: Copper clad steel

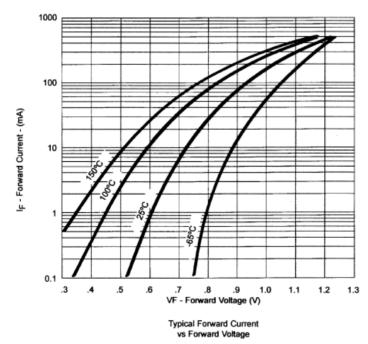
LEAD FINISH: Tin / Lead

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

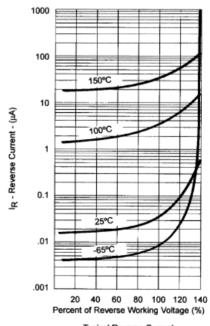
THERMAL IMPEDANCE: (Z_{O,JX}): 70 °C/W maximum

POLARITY: Cathode end is banded.

Graphs



NOTE: All temperatures shown on graphs are junction temperatures



Typical Reverse Current vs Reverse Voltage

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