

Silicon Switching Diodes

1N4150, 1N4150-1 & 1N3600

Features

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

Maximum Ratings

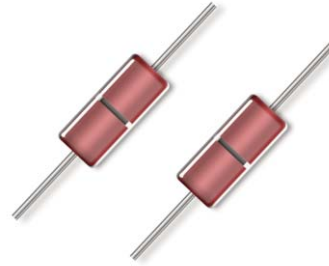
Operating & Storage Temperature: -65°C to $+175^{\circ}\text{C}$

Operating Current: 300 mA @ $T_A = +25^{\circ}\text{C}$

Derating: 2.0 mA dc/ $^{\circ}\text{C}$ Above $T_L = +75^{\circ}\text{C}$ @ $L = 3/8"$

Surge Current A: 2A (pk) $t_p = 8.3$ ms, $V_{RM} = 0$

Surge Current B: 4A (pk) $t_p = 1$ us, $V_{RM} = 0$



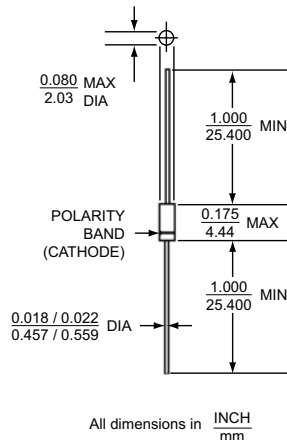
Electrical Specifications @ $+25^{\circ}\text{C}$ (Unless Otherwise Specified)

TYPE Number	V_{BR} $I_R = 10 \mu\text{A}$	V_{RWM}	I_{R1} $V_R = 50 \text{ Vdc}$ $T_A = 25^{\circ}\text{C}$	I_{R2} $V_R = 50 \text{ Vdc}$ $T_A = 150^{\circ}\text{C}$	C $I_R = 0$; $f = 1 \text{ MHz}$ ac signal = 50 mV (p-p)	T_{rr} $I_F = I_R = 10$ to 100 mA dc $R_L = 100 \Omega$
	V dc	V (pk)	$\mu\text{A dc}$	$\mu\text{A dc}$	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_{F1} $I_F = 1 \text{ mA dc}$	V_{F2} $I_F = 10 \text{ mA dc}$	V_{F3} $I_F = 50 \text{ mA dc}$ (Pulsed)	V_{F4} $I_F = 100 \text{ mA dc}$ (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

Outline Drawing



LEADED DESIGN DATA

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

LEAD MATERIAL: Copper clad steel

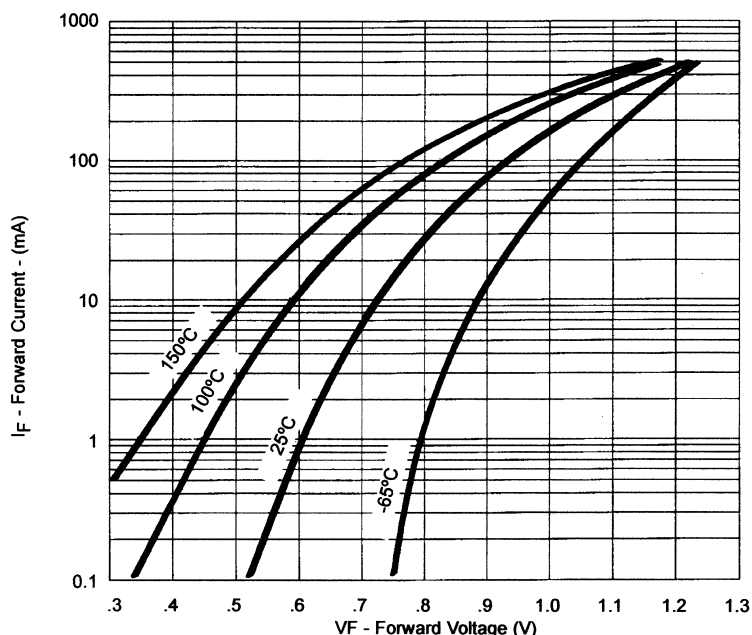
LEAD FINISH: Tin / Lead

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

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

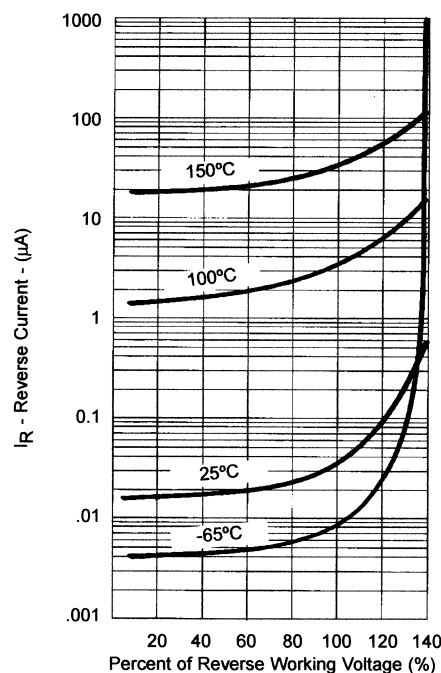
POLARITY: Cathode end is banded.

Graphs



Typical Forward Current
vs Forward Voltage

NOTE : All temperatures shown on graphs are
junction temperatures



Typical Reverse Current
vs Reverse Voltage

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