# 1N3600, 1N4150 & 1N4150-1



## Silicon Switching Diode

Rev. V1

#### **Features**

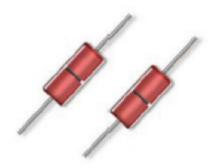
- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/231
- Metallurgically Bonded
- · Hermetically Sealed
- Double Plug Construction

## **Maximum Ratings**

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

Operating Current: 300 mA @ T<sub>A</sub> = +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  $\mu$ s,  $V_{RM}$  = 0



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

TYPE#	V <sub>BR</sub> I <sub>R</sub> = 10 μA	$V_{RWM}$	I <sub>R</sub> 1 V <sub>R</sub> = 50 Vdc T <sub>A</sub> = 25°C	I <sub>R</sub> 2 V <sub>R</sub> = 50 Vdc T <sub>A</sub> =150°C	C I <sub>R</sub> = 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 <b>A</b> dc	μ <b>A</b> 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

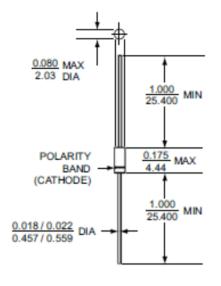
Limits	V <sub>F</sub> 1 I <sub>F</sub> = 1 mA dc	V <sub>F</sub> 2 I <sub>F</sub> = 10 mA dc	V <sub>F</sub> 3 I <sub>F</sub> = 50 mA dc (Pulsed)	V <sub>F</sub> 4 I <sub>F</sub> = 100 mA dc (Pulsed)	$V_F5$ $I_F = 200 \text{ mA dc}$ (Pulsed)
	V dc	V dc	V dc	V dc	V dc
minimum	0.540	0.660	0.760	0.820	0.870
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

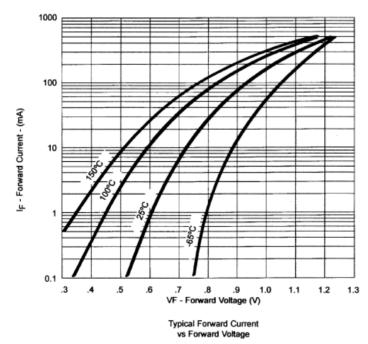
LEAD FINISH: Tin / Lead

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

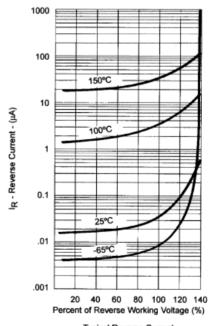
THERMAL IMPEDANCE: (Z<sub>O,JX</sub>): 70 °C/W maximum

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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