

# 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

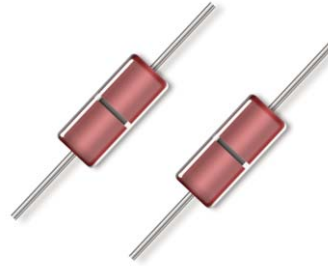
Operating & Storage Temperature: -65°C to +175°C

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

Derating: 2.0 mA dc/°C Above TL = + 75°C @ L = 3/8"

Surge Current A: 2A (pk) t<sub>p</sub> = 8.3 ms, V<sub>RM</sub> = 0

Surge Current B: 4A (pk) t<sub>p</sub> = 1 us, V<sub>RM</sub> = 0



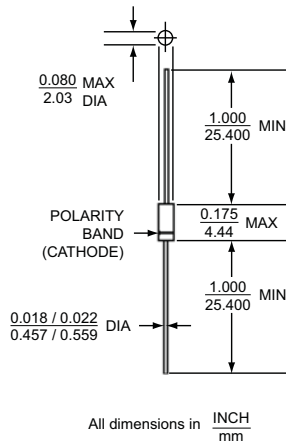
### Electrical Specifications @ +25 °C (Unless Otherwise Specified)

TYPE Number	V <sub>BR</sub>	V <sub>RWM</sub>	I <sub>R1</sub>	I <sub>R2</sub>	C	T <sub>rr</sub>
	I <sub>R</sub> = 10 μA		V <sub>R</sub> = 50 Vdc T <sub>A</sub> = 25 °C	V <sub>R</sub> = 50 Vdc T <sub>A</sub> = 150°C	I <sub>R</sub> = 0; f = 1 MHz ac signal = 50 mV (p-P)	I <sub>F</sub> = I <sub>R</sub> = 10 to 100 mA dc R <sub>L</sub> = 100 Ω
	V dc	V (pk)	μA dc	μA 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>F1</sub>	V <sub>F2</sub>	V <sub>F3</sub>	V <sub>F4</sub>	V <sub>F5</sub>
	I <sub>F</sub> = 1 mA dc	I <sub>F</sub> = 10 mA dc	I <sub>F</sub> = 50 mA dc (Pulsed)	I <sub>F</sub> = 100 mA dc (Pulsed)	I <sub>F</sub> = 200 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

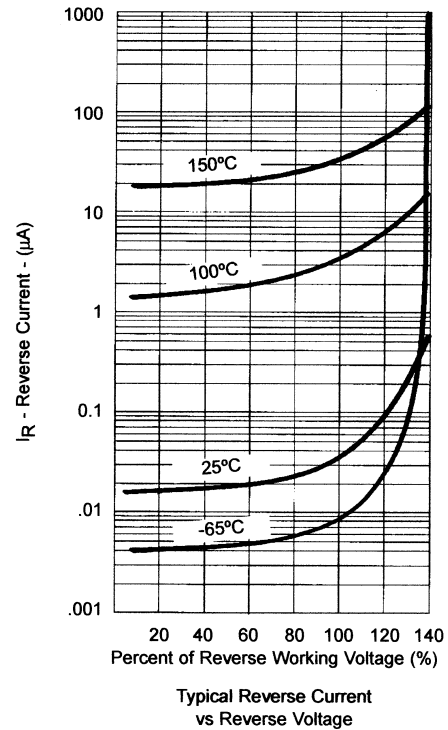
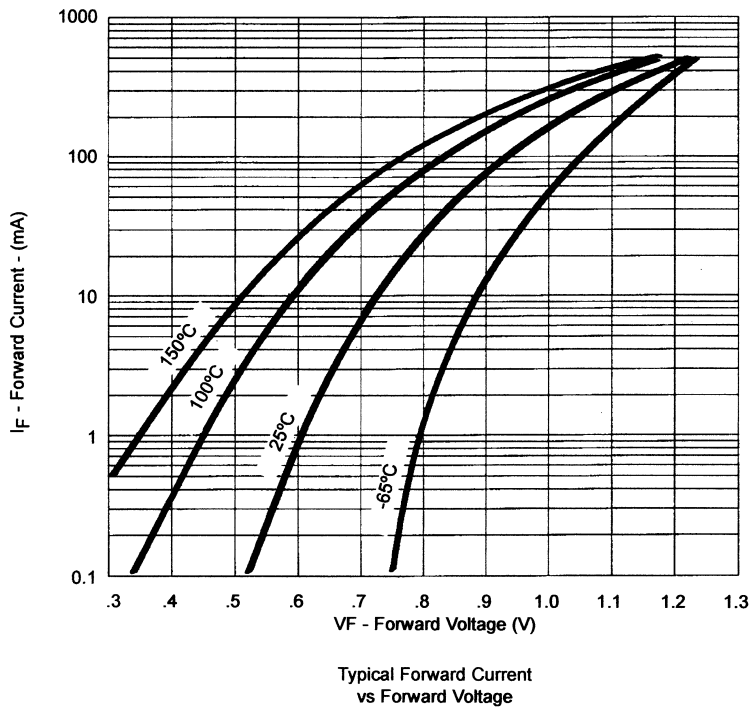
**THERMAL RESISTANCE:** (R<sub>θJL</sub>): 250 °C/W maximum at L = 0.375 in

**THERMAL IMPEDANCE:** (Z<sub>θJX</sub>): 70 °C/W maximum

**POLARITY:** Cathode end is banded.



Graphs



**NOTE :** All temperatures shown on graphs are junction temperatures

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