

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

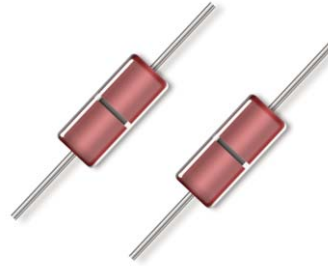
Operating & Storage Temperature: -65°C to +175°C

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_p = 8.3 ms, V_{RM} = 0

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



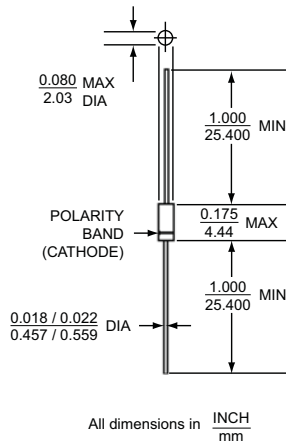
Electrical Specifications @ +25 °C (Unless Otherwise Specified)

TYPE Number	V _{BR}	V _{RWM}	I _{R1}	I _{R2}	C	T _{rr}
	I _R = 10 μA		V _R = 50 Vdc T _A = 25 °C	V _R = 50 Vdc T _A = 150°C	I _R = 0; f = 1 MHz ac signal = 50 mV (p-P)	I _F = I _R = 10 to 100 mA dc R _L = 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 _{F1}	V _{F2}	V _{F3}	V _{F4}	V _{F5}
	I _F = 1 mA dc	I _F = 10 mA dc	I _F = 50 mA dc (Pulsed)	I _F = 100 mA dc (Pulsed)	I _F = 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

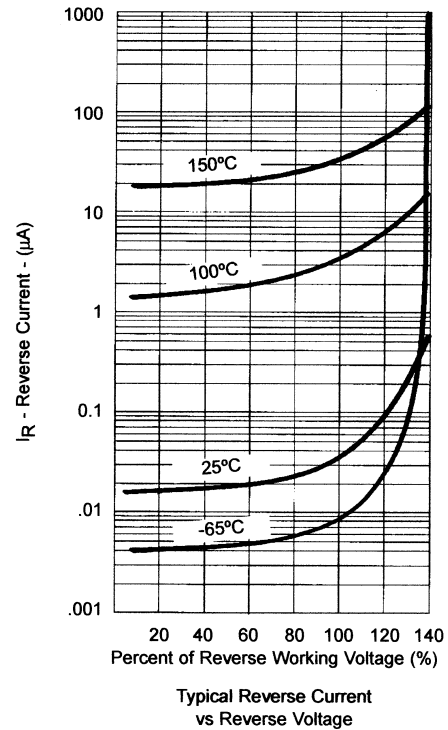
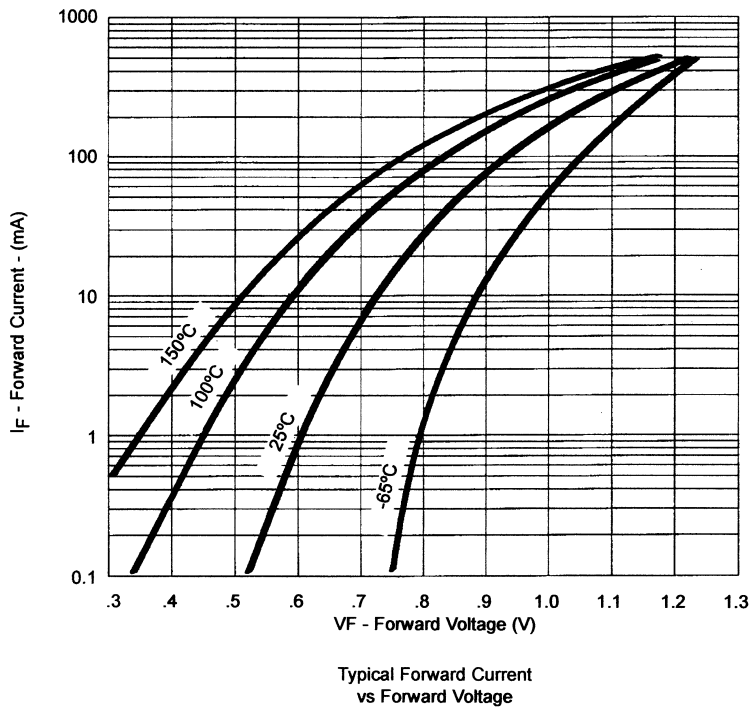
THERMAL RESISTANCE: (R_{θJL}): 250 °C/W maximum at L = 0.375 in

THERMAL IMPEDANCE: (Z_{θJX}): 70 °C/W maximum

POLARITY: Cathode end is banded.



Graphs



NOTE : All temperatures shown on graphs are junction temperatures

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