

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

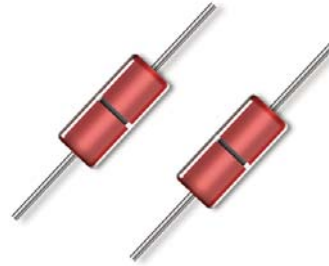
Operating & Storage Temperature: -65°C to +175°C

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, $V_{RM} = 0$



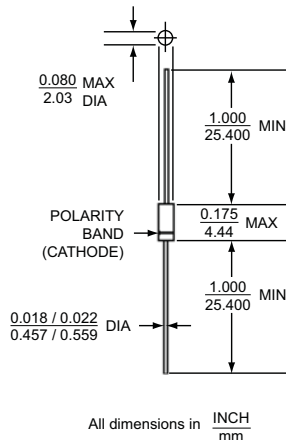
Electrical Specifications @ +25 °C (Unless Otherwise Specified)

TYPE Number	V_{BR}	V_{RWM}	I_{R1}	I_{R2}	C	T_{rr}
	$I_R = 10 \mu A$		$V_R = 50$ Vdc $T_A = 25^\circ C$	$V_R = 50$ Vdc $T_A = 150^\circ C$	$I_R = 0$; $f = 1$ MHz ac signal = 50 mV (p-P)	$I_F = I_R = 10$ to 100 mA dc $R_L = 100 \Omega$
	V dc	V (pk)	μA dc	μA dc	pF	ns
1N3600	75	50	0.1	100	2.5	4.0
1N4151, -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

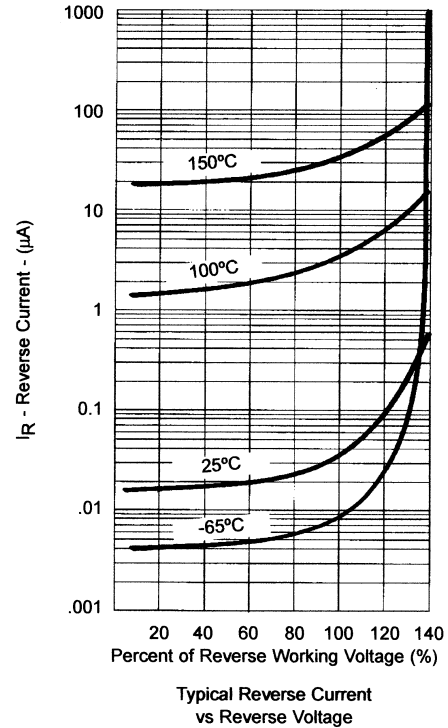
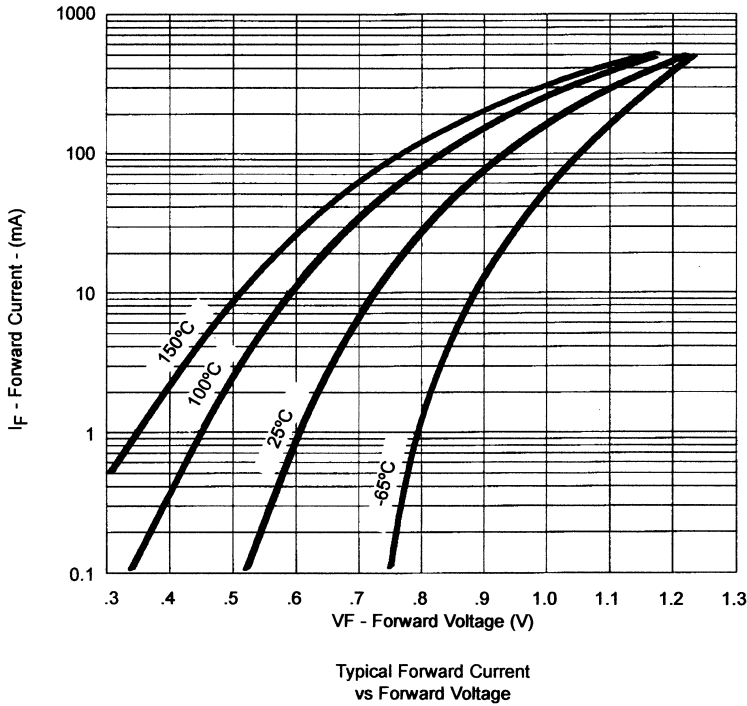
THERMAL RESISTANCE: ($R_{\theta JL}$): 250 °C/W maximum at L = 0.375 in

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

POLARITY: Cathode end is banded.



Graphs



NOTE : All temperatures shown on graphs are junction temperatures

Aeroflex / Metelics, Inc.

975 Stewart Drive,
Sunnyvale, CA 94085
Tel: (408) 737-8181
Fax: (408) 733-7645

Sales: 888-641-SEMI (7364)

Hi-Rel Components

9 Hampshire Street,
Lawrence, MA 01840
Tel: (603) 641-3800
Fax: (978) 683-3264

www.aeroflex.com/metelics-hirelcomponents

www.aeroflex.com/metelics metelics-sales@eroflex.com

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