

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

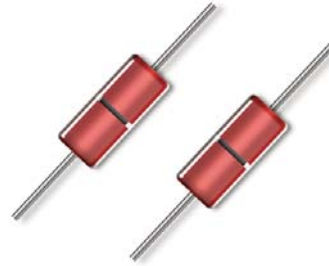
Operating & Storage Temperature: -65°C to +175°C

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, $V_{RM} = 0$



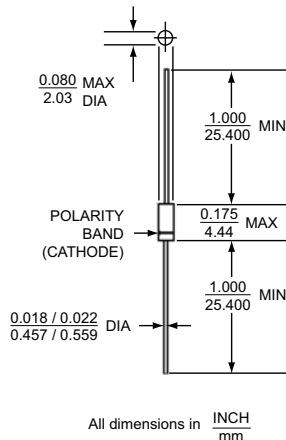
Electrical Specifications @ +25 °C (Unless Otherwise Specified)

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

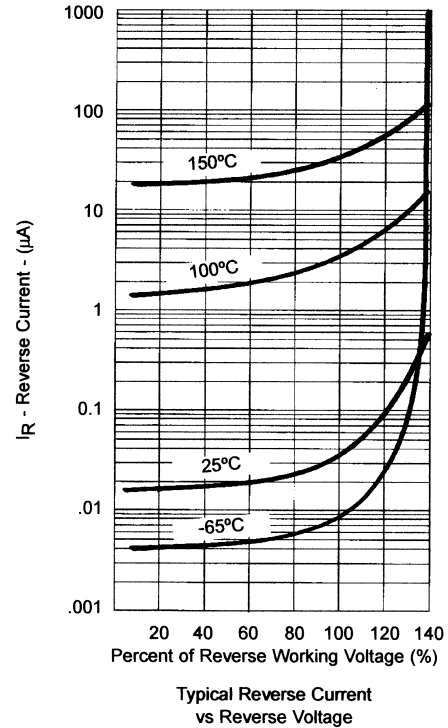
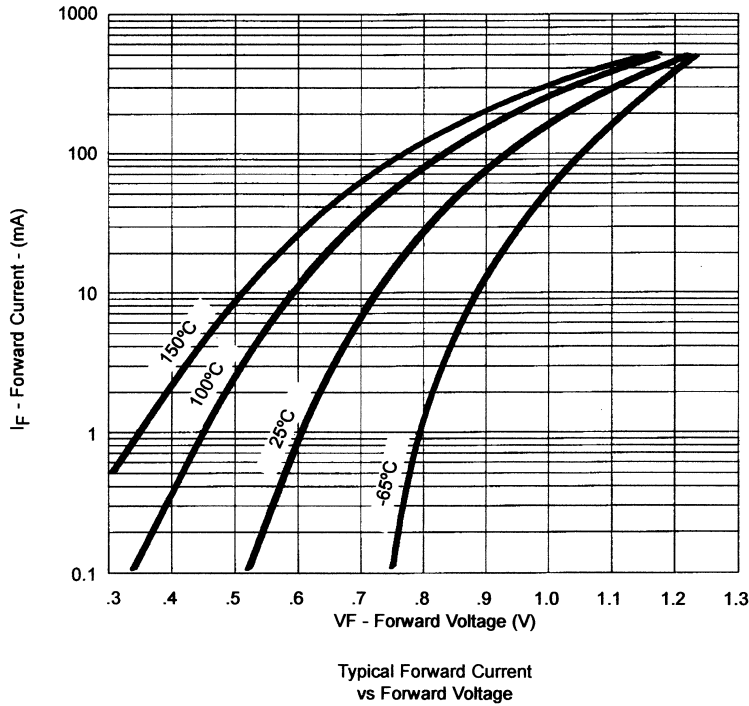
THERMAL RESISTANCE: ($R_{\theta JL}$): 250 °C/W maximum at L = 0.375 in

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@aeroflex.com

Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2009 Aeroflex / Metelics. All rights reserved.

ISO 9001: 2008 certified companies



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.