

Silicon Switching Diode Series

1N4454 and 1N4454-1



Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/144
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

Maximum Ratings @ 25°C

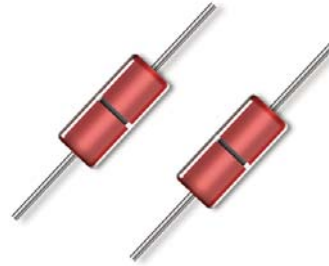
Operating & Storage Temperature: -55 °C to +175 °C

Operating Current: 200mA, $T_A = +75$ °C

Derating Factor: 2.0mA dc/°C above $T_A = +75$ °C @ $L = 3/8$

Surge Current A: 2A (pk) $t_p = 8.3$ mS, $V_{RM} = 0$

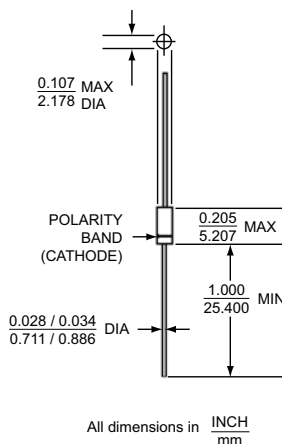
Surge Current B: 4A (pk) $t_p = 1$ us, $V_{RM} = 0$



DC Electrical Characteristics

V_{BR} @ 5 μ A	V_{RWM}	I_0	V_{f1} @ $I_F = 10$ mA	V_{f2} @ $I_F = 10$ mA $T_A = 150$ °C	t_{rr}	I_{R1} @ 50 V dc	I_{R2} @ 50 V $T_A = 150$ °C	CAPACITANCE @ 0 V
Volts	Volts (pk)	mA	V dc	V dc	n sec	μ A	μ A	pF
75	50	200	0.8	0.7	4	0.1	100	2.0

Outline Drawing



LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/144, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

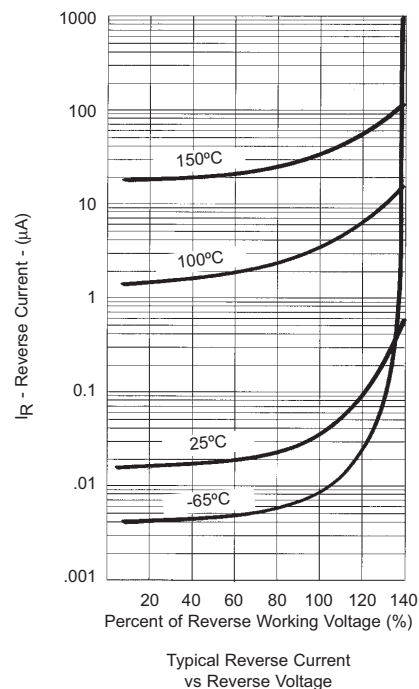
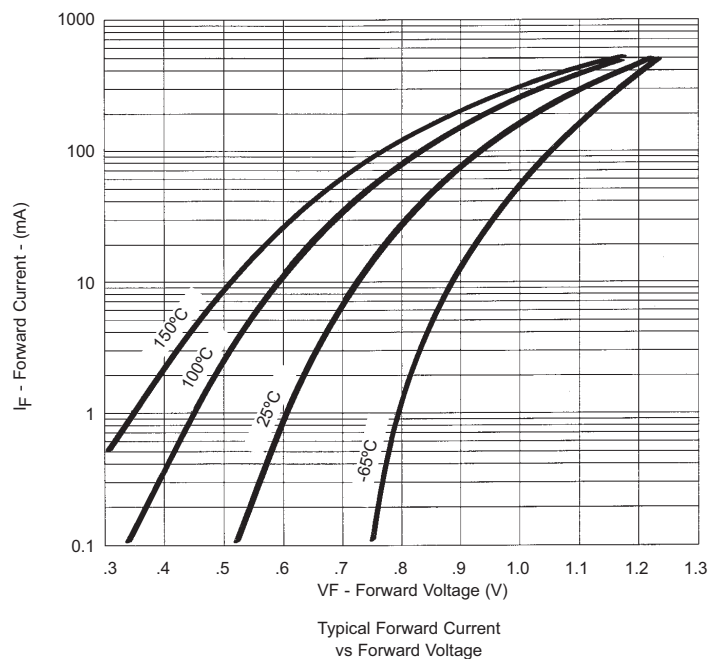
THERMAL RESISTANCE: ($R_{\theta JL}$): 250 °C/W maximum at $L = 0.375$ in

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

54 Grenier Field Road,
Londonderry, NH 03053
Tel: (603) 641-3800
Fax: (603)-641-3500

ISO 9001: 2008 certified companies

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.



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