# Silicon Switching Diode Series 1N4454UR and 1N4454UR-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<sub>A</sub>= +75 °C

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

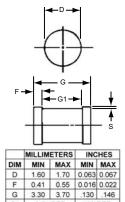
Surge Current A:  $2A \text{ (pk) } t_p = 8.3 \text{ mS, } V_{RM} = 0$ 

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

### **DC Electrical Characteristics**

| V <sub>BR</sub><br>@5μA | V <sub>RWM</sub> | I <sub>0</sub> | $V_{f1}@I_F = 10 \text{ mA}$ | $V_{f2}@I_F = 10 \text{ mA}$<br>TA = 150°C | t <sub>rr</sub> | I <sub>R1</sub><br>@ 50 V dc | I <sub>R2</sub> @ 50 V<br>TA = 150°C | CAPACITANCE<br>@ 0 V |
|-------------------------|------------------|----------------|------------------------------|--|-----------------|------------------------------|--------------------------------------|----------------------|
| Volts                   | Volts (pk)       | mA             | V dc                         | V dc                                       | n sec           | μА                           | μΑ                                   | pF                   |
| 75                      | 50               | 200            | 0.8                          | 0.7  | 4               | 0.1                          | 100                                  | 2.0                  |

# **Outline Drawing**



2.54 REF.

#### LEADED DESIGN DATA

CASE: DO – 213AA, Hermetically sealed glass case.

(MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: (R<sub>OJEC</sub>): 100 °C/W maximum

THERMAL IMPEDANCE: (Z<sub>O.JX</sub>): 70 °C/W maximum

POLARITY: Cathode end is banded.



Revision Date: 12/1/2009

New Product

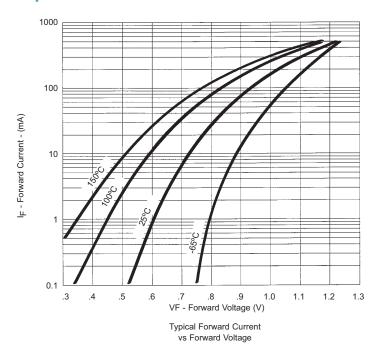
Downloaded from Elcodis.com electronic components distributor

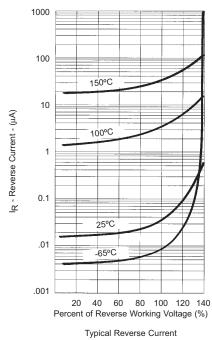
.100 REF.





### **Graphs**





vs Reverse Voltage

NOTE: All temperatures shown on graphs are juction 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

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

54 Grenier Field Road,

Tel: (603) 641-3800

Fax: (603)-641-3500

Londonderry, NH 03053

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.