

# 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,  $T_A = +75$  °C

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

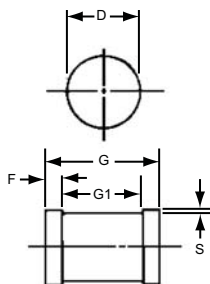
Surge Current A: 2A (pk)  $t_p = 8.3$  mS,  $V_{RM} = 0$

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

### DC Electrical Characteristics

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

### Outline Drawing



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
D	1.60	1.70	0.063	0.067
F	0.41	0.55	0.016	0.022
G	3.30	3.70	.130	.146
G1	2.54 REF.		.100 REF.	
S	0.03 MIN.		.001 MIN.	

#### LEADED DESIGN DATA

**CASE:** DO – 213AA, Hermetically sealed glass case.  
(MELF, SOD-80, LL34)

**LEAD FINISH:** Tin / Lead

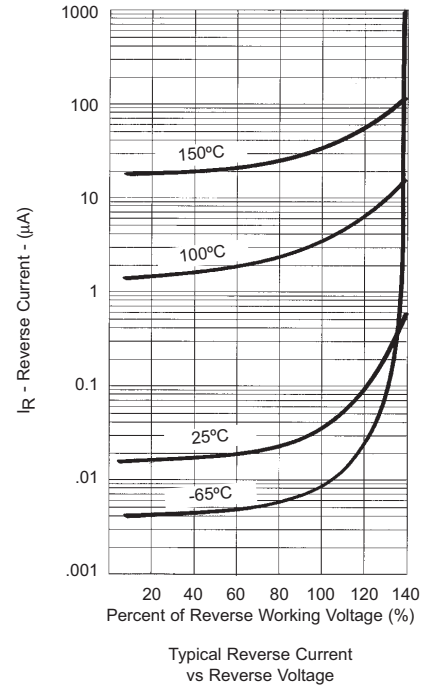
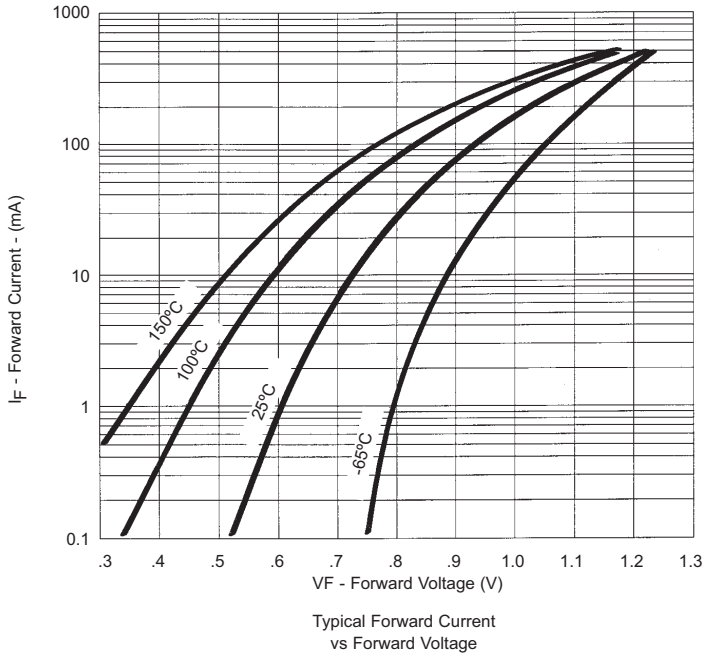
**THERMAL RESISTANCE:** ( $R_{\theta JEC}$ ): 100 °C/W maximum

**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](http://www.aeroflex.com/metelics-hirelcomponents)

[www.aeroflex.com/metelics](http://www.aeroflex.com/metelics)      [metelics-sales@aeroflex.com](mailto: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.