



# Silicon Switching Diode Series

## 1N914UR & 1N4148UR-1



### Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/116
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction



### Maximum Ratings

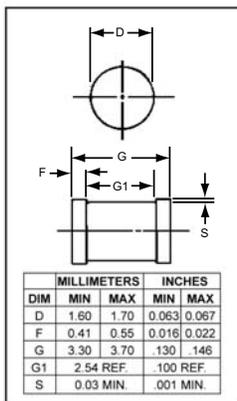
Operating & Storage Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
 Surge Current A, sine 8.3ms: 2.0 A  
 Surge Current B, square 8.3ms: 0.704 A  
 Operating Current: 125mA,  $T_A = +75^{\circ}\text{C}$   
 Derating Factor: 2.0 mA/ $^{\circ}\text{C}$  above  $T_A = +25^{\circ}\text{C}$   
 D.C. Reverse Voltage (VRWM): 75V

### Electrical Specifications @ $+25^{\circ}\text{C}$ (Unless Otherwise Specified)

JEDEC TYPE Number	$V_{BR}$ @ 100 $\mu\text{A}$	$V_{RWM}$	$I_O$	$V_{f1}$ $I_F = 10 \text{ mA}$	$V_{f2}$ $I_F = 50 \text{ mA}$	$T_{rr}$ (Note 1)	$I_{R1}$ @ 20 Vdc	$I_{R2}$ @ 75 Vdc	$I_{R3}$ @ 20 Vdc $T_A = 150^{\circ}\text{C}$	$I_{R4}$ @ 75 Vdc $T_A = 150^{\circ}\text{C}$	Capacitance @ 0V	Capacitance @ 1.5 V
	Volts	Volts (pk)	mA	Vdc	Vdc	nsec	nA	$\mu\text{A}$	$\mu\text{A}$	$\mu\text{A}$	pF	PF
1N914UR	100	75	75	0.8	1.2	5	25	0.5	35	75	4.0	2.8
1N4148UR-1	100	75	200	0.8	1.2	5	35	0.5	35	75	4.0	2.8

Note1:  $I_F = I_R = 10 \text{ mA}$ ,  $R_L = 100 \text{ ohms}$ .

### Outline Drawing



#### LEADED DESIGN DATA

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

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\theta JC}$ ): 100  $^{\circ}\text{C}/\text{W}$  maximum at  $L = 0 \text{ inch}$

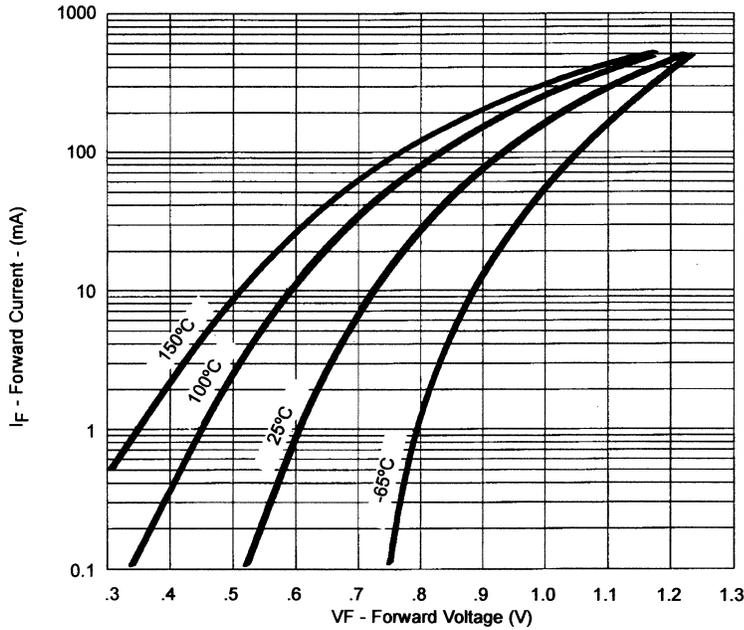
**THERMAL IMPEDANCE:** ( $Z_{\theta JX}$ ): 25  $^{\circ}\text{C}/\text{W}$  maximum

**POLARITY:** Diode to be operated with the banded (cathode) end positive.

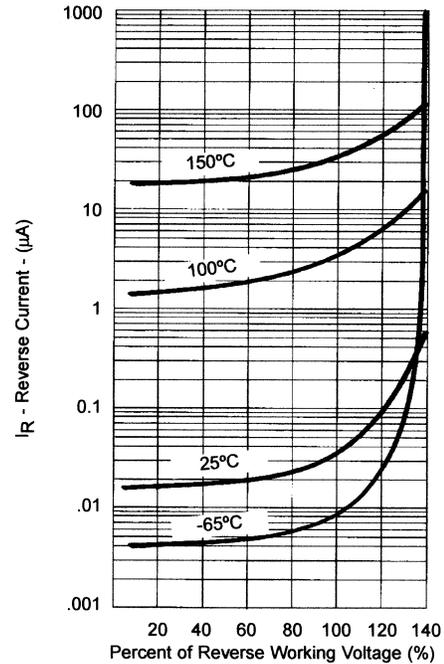
**MOUNTING POSITION:** Any.



Graphs



Typical Forward Current vs Forward Voltage



Typical Reverse Current vs Reverse Voltage

**NOTE :** All temperatures shown on graphs are junction temperatures

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