

# Silicon Switching Diodes

## 1N914 & 1N4148-1



### Features

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

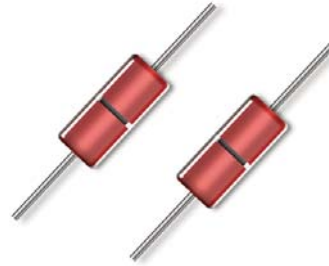
### Maximum Ratings

Operating & Storage Temperature:  $-65^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$

Operating Current: 200 mA @  $T_A = +25^{\circ}\text{C}$

Derating Factor: 1.14 mA/ $^{\circ}\text{C}$  above  $T_A = +25^{\circ}\text{C}$

Surge Current A: 2A, sinewave,  $P_W = 8.3$  ms

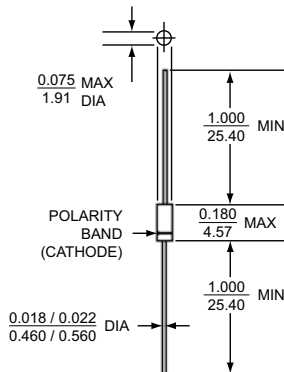


### Electrical Specifications @ $+25^{\circ}\text{C}$ (Unless Otherwise Specified)

JEDEC TYPE Number	$V_{BR}$ @ 100 $\mu\text{A}$	$V_{RWM}$	$I_O$	$V_{f1}$ $I_F = 10$ mA	$V_{f2}$ $I_F = 50$ 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
1N914	100	75	75	0.8	1.2	5	25	0.5	35	75	4.0	2.8
1N4148-1	100	75	200	0.8	1.2	5	35	0.5	35	75	4.0	2.8

Note1:  $I_F = I_R = 10$  mA,  $R_L = 100$  ohms.

### Outline Drawing



All dimensions in  $\frac{\text{INCH}}{\text{mm}}$

#### LEADED DESIGN DATA

**CASE:** Hermetically sealed glass case per MIL-S-19500/116, DO – 35

**LEAD MATERIAL:** Copper clad steel

**LEAD FINISH:** Tin / Lead

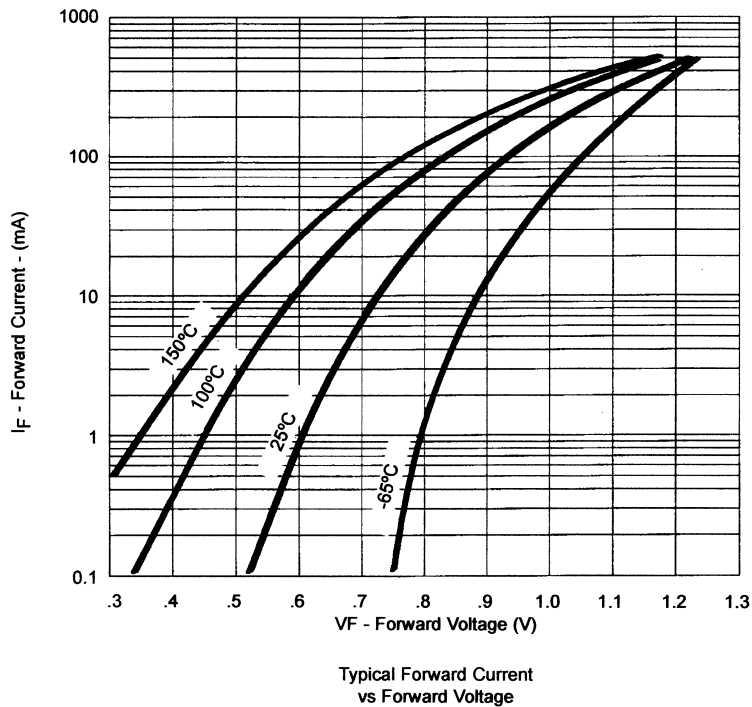
**THERMAL RESISTANCE:** ( $R_{\theta JL}$ ): 250  $^{\circ}\text{C}/\text{W}$  maximum at  $L = 0.375$  in

**THERMAL IMPEDANCE:** ( $Z_{\theta JX}$ ): 70  $^{\circ}\text{C}/\text{W}$  maximum

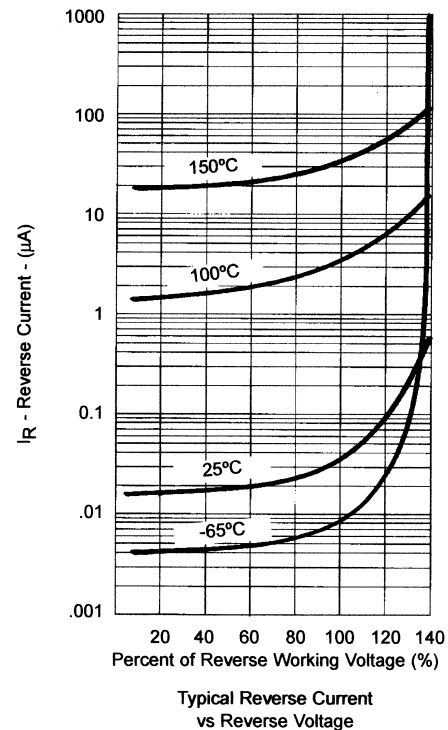
**POLARITY:** Cathode end is banded.



## Graphs



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



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