

# 1N4454 & 1N4454-1



## Silicon Switching Diode

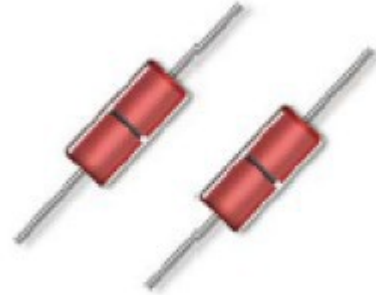
Rev. V1

### Features

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

### Maximum Ratings

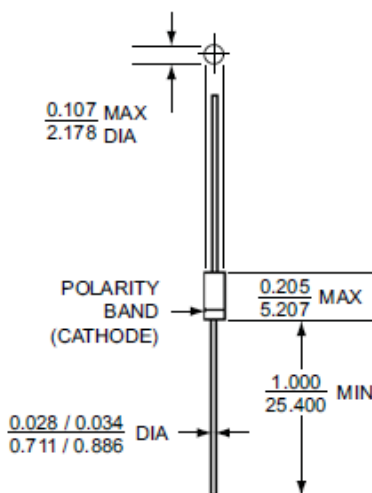
Operating & Storage Temperature:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
 Operating Current: 200 mA @  $T_A = +75^{\circ}\text{C}$   
 Derating: 2 mA DC/ $^{\circ}\text{C}$  above  $T_L = +75^{\circ}\text{C}$  @  $L = 3/8"$   
 Surge Current A: 2 A (pk)  $t_P = 8.3$  ms,  $V_{RM} = 0$   
 Surge Current B: 4 A (pk)  $t_P = 1$   $\mu\text{s}$ ,  $V_{RM} = 0$



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

$V_{BR}$ @ 5 $\mu\text{A}$	$V_{RWM}$	$I_0$	$V_{F1}$ @ $I_F = 10$ 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	$\mu\text{A}$	$\mu\text{A}$	pF
75	50	200	0.8	0.7	4	0.1	100	2

### Outline



#### 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  $^{\circ}\text{C}/\text{W}$  maximum at  $L = 0.375$  in

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

POLARITY: Cathode end is banded.

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

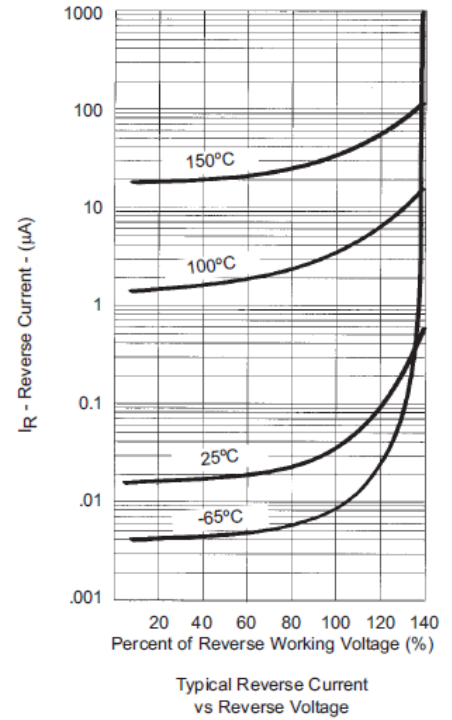
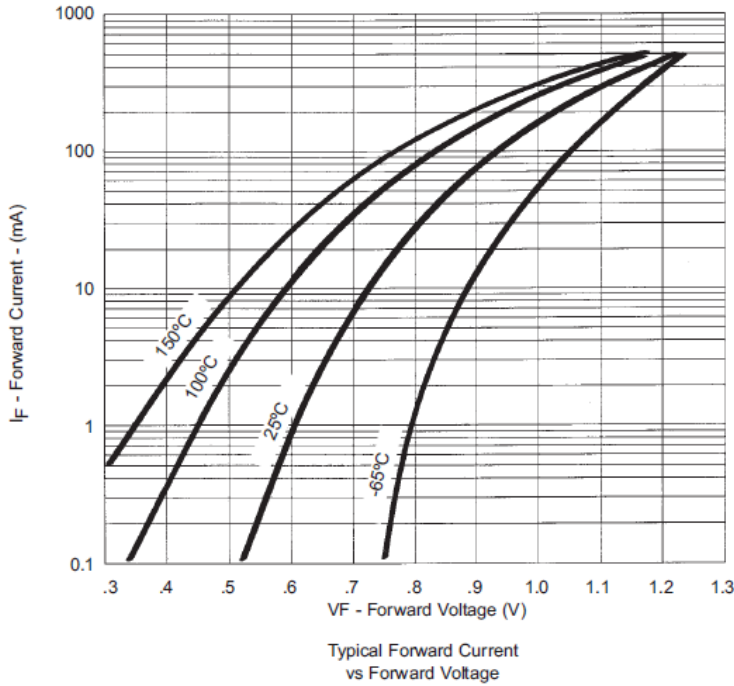
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### Graphs



NOTE: All temperatures shown on graphs are junction temperatures.

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