

- 1N4454 and 1N4454-1 AVAILABLE IN JAN, JANTX, AND JANTXV  
PER MIL-PRF-19500/144
- SWITCHING DIODE
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

1N4454  
1N4454-1

### MAXIMUM RATINGS

Junction Temperature: -55°C to +175°C  
 Storage Temperature: -55°C to +175°C  
 Operating Current: 200 mA @  $T_A = +25^\circ\text{C}$   
 Derating Factor: 1.33 mA/°C Above  $T_A = +25^\circ\text{C}$   
 Surge Current A: 1A (pk),  $P_W = 1$  sec  
 Surge Current B: 4A (pk),  $P_W = 1$   $\mu\text{s}$

ELECTRICAL CHARACTERISTICS @ 25°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 $T_A = 150^\circ\text{C}$	$t_{rr}$
Volts	Volts (pk)	mA	V dc	V dc	n sec
75	50	200	1.0	0.7	4

$I_{R1}$ @ 50 V dc	$I_{R2}$ @ 50 V $T_A = 150^\circ\text{C}$	CAPACITANCE @ 0 V
$\mu\text{A}$	$\mu\text{A}$	pF
0.1	100	2.0

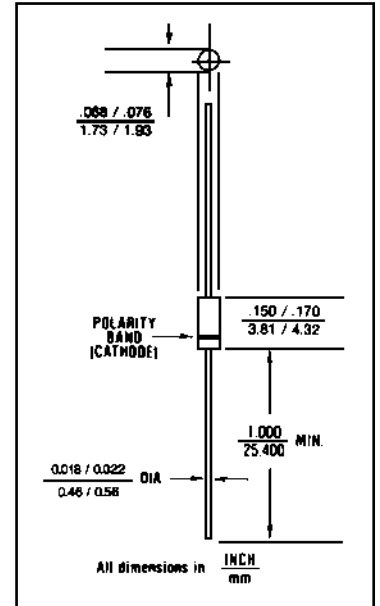


FIGURE 1

### DESIGN DATA

**CASE:** Hermetically sealed  
 glass case per MIL-S-19500/144  
 D0-35 outline

**LEAD MATERIAL:** Copper clad steel.

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\theta JL}$ ):  
 250 °C/W maximum at L = .375

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

**POLARITY:** Cathode end is banded.

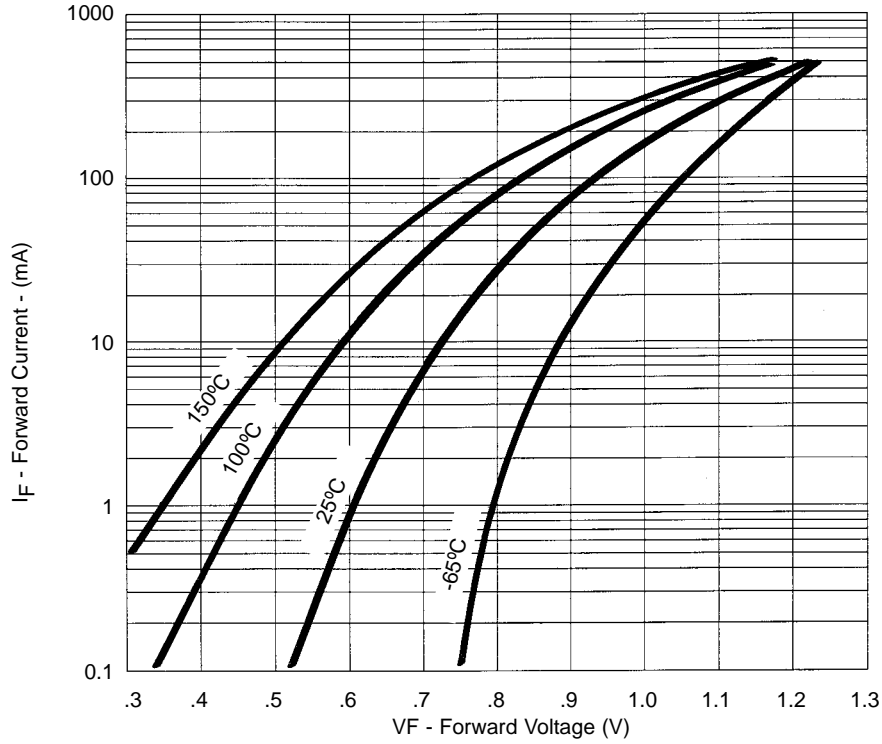
**MOUNTING POSITION:** Any.



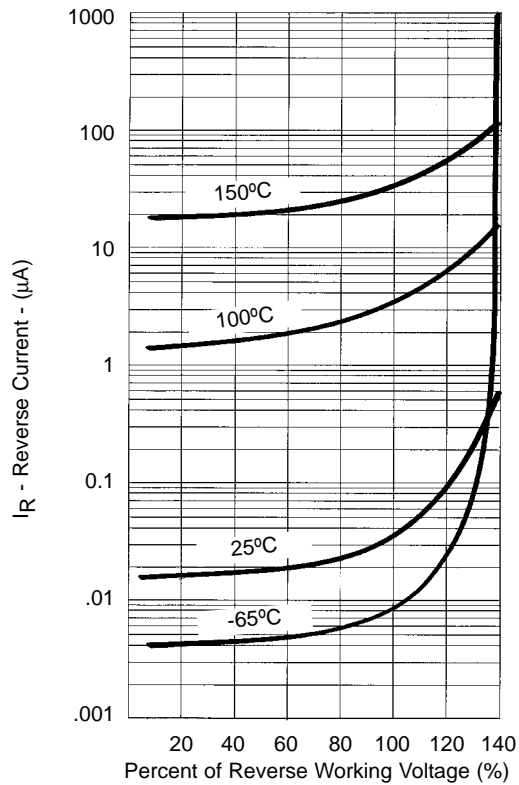
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# IN4454 and 1N4454-1



**FIGURE 2**  
Typical Forward Current  
vs Forward Voltage



**FIGURE 3**  
Typical Reverse Current  
vs Reverse Voltage

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