

- 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), $P_W = 1$ μs

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

| V_{BR} @5 μA | 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 |
|-----------------------|---|----------------------|
| μA | μA | pF |
| 0.1 | 100 | 2.0 |

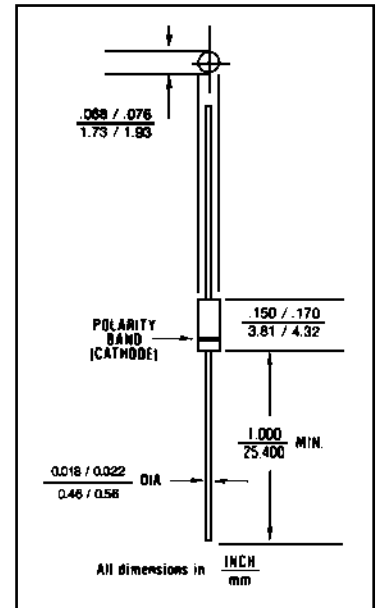


FIGURE 1

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

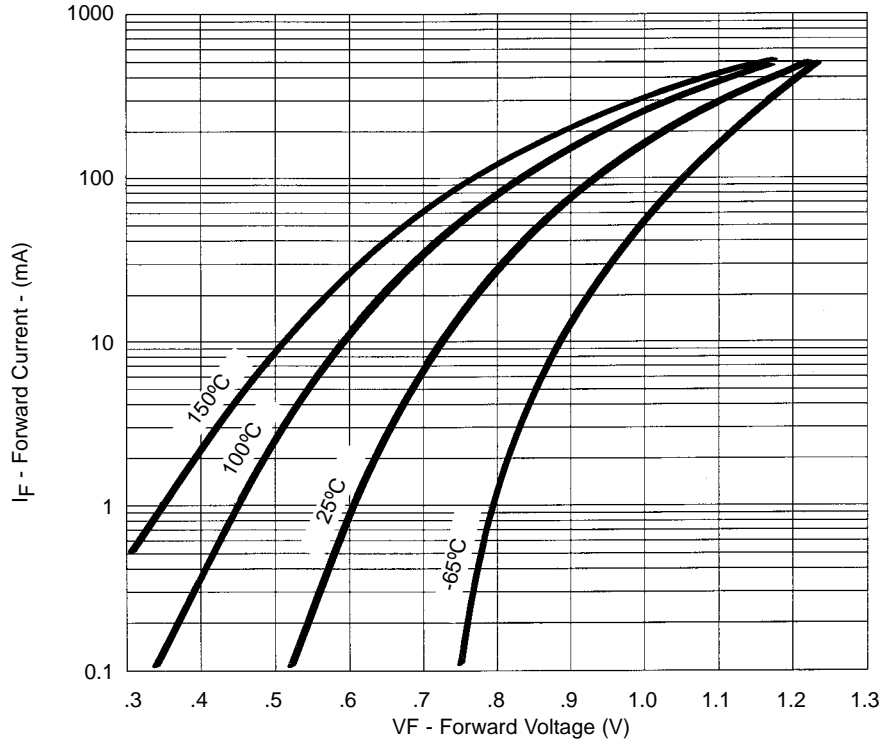


FIGURE 2
Typical Forward Current
vs Forward Voltage

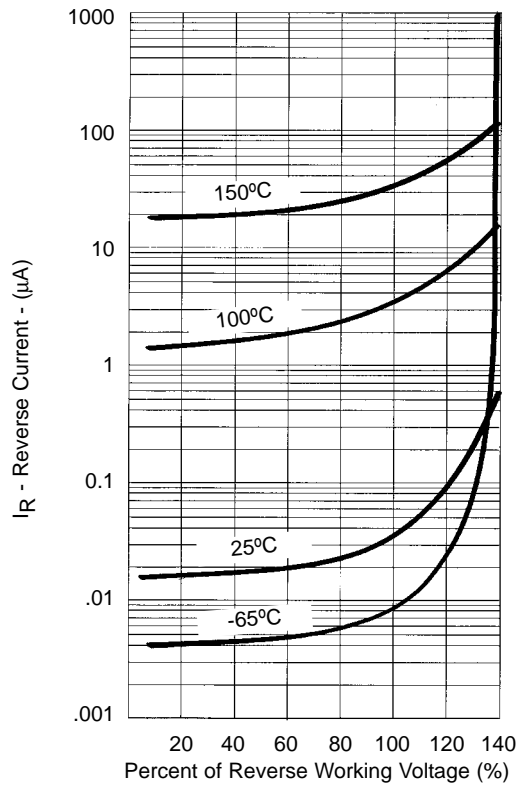


FIGURE 3
Typical Reverse Current
vs Reverse Voltage

NOTE : All temperatures shown on graphs are junction temperatures