

- 1N6639 thru 1N6641 AVAILABLE IN JAN, JANTX, JANTXV, AND JANS PER MIL-PRF-19500/609
- SWITCHING DIODES
- NON-CAVITY GLASS PACKAGE
- METALLURGICALLY BONDED

1N6639

1N6640

1N6641

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
 Storage Temperature: -65°C to +175°C
 Operating Current: 300 mA
 Derating: 3 mA/°C Above $T_L = +75^\circ\text{C} @ L = \frac{3}{8}"$
 Surge Current: $I_{FSM} = 2.5\text{A}$, $P_w = 8.3\text{ms}$

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

| TYPES | V_{BRR} @ 10 μA | V_{RWM} | I_{R1} @ $T_A = +25^\circ\text{C}$ $V_R = V_{RWM}$ | I_{R2} @ $T_A = +150^\circ\text{C}$ $V_R = V_{RWM}$ | T_{FR} $I_F = 200\text{ mA}$ | T_{RR} | C_T $V_R = 0$ |
|--------|---------------------------------|------------|--|---|-----------------------------------|----------|--------------------|
| | $V_{(PK)}$ MIN | $V_{(PK)}$ | nA dc | μA dc | ns | ns | pF |
| 1N6639 | 100 | 75 | 100 | 100 | 10 | 4.0 | 2.5 |
| 1N6640 | 75 | 50 | 100 | 100 | 10 | 4.0 | 2.5 |
| 1N6641 | 75 | 50 | 100 | 100 | 10 | 5.0 | 3.0 |

FORWARD VOLTAGE:

| TYPES | V_F @ I_F | | mA (PULSED) |
|--------|---------------|------|----------------|
| | V dc | | |
| | MIN | MAX | |
| 1N6639 | - | 1.20 | 500 |
| 1N6640 | 0.54 | 0.62 | 1 |
| | 0.76 | 0.86 | 50 |
| | 0.82 | 0.92 | 100 |
| | 0.87 | 1.00 | 200 |
| 1N6641 | - | 1.10 | 200 |

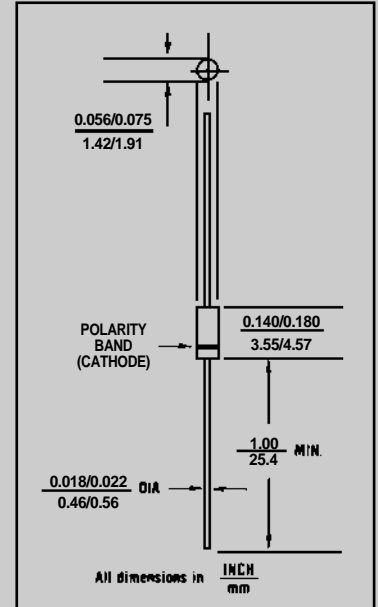


FIGURE 1

DESIGN DATA

CASE: Hermetically sealed, "D" Body per MIL-PRF- 19500/609. D-5D

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JL}$): 160 °C/W maximum at $L = .375$

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 25 °C/W maximum

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any



IN6639 thru IN6641

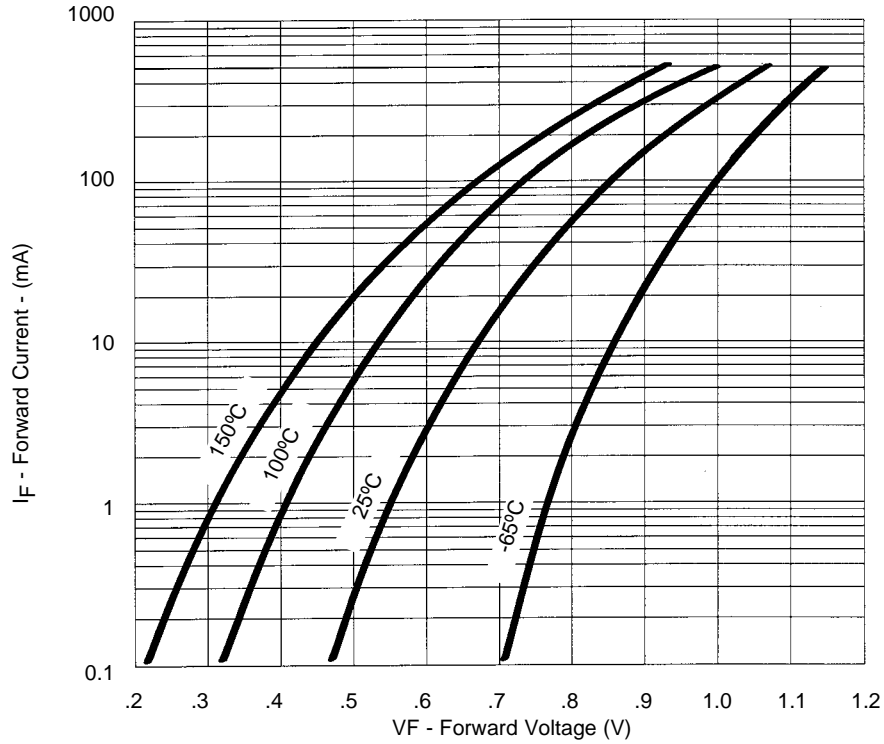
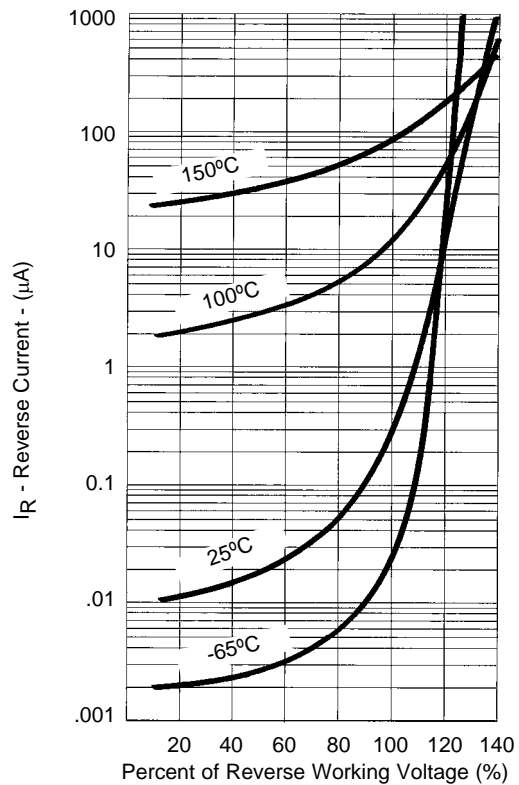


FIGURE 2
Typical Forward Current
vs Forward Voltage



NOTE : All temperatures shown on graphs are junction temperatures

FIGURE 3
Typical Reverse Current
vs Reverse Voltage