

1N4150

FEATURES :

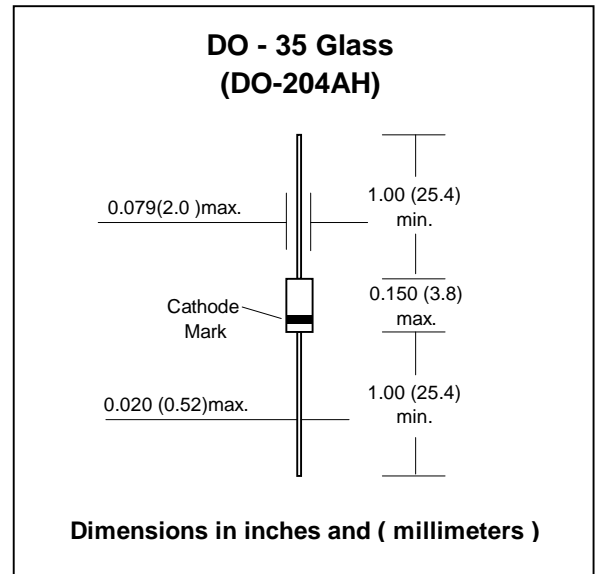
- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 50 V
- Repetitive peak reverse voltage: max. 75 V
- Repetitive peak forward current: max. 600 mA
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

HIGH SPEED SWITCHING DIODE



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Value | Unit |
|--|-----------|--------------|------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 75 | V |
| Maximum Continuous Reverse Voltage | V_{RM} | 50 | V |
| Maximum Continuous Forward Current | I_F | 200 | mA |
| Maximum Power Dissipation | P_D | 500 | mW |
| Maximum Repetitive Peak Forward Current | I_{FRM} | 600 | mA |
| Maximum Surge Forward Current at $t = 1s$, $T_j = 25^\circ C$ | I_{FSM} | 0.5 | A |
| Maximum Junction Temperature | T_J | 200 | $^\circ C$ |
| Storage Temperature Range | T_S | -65 to + 200 | $^\circ C$ |

Electrical Characteristics ($T_J = 25^\circ C$ unless otherwise noted)

| Parameter | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|-----------------------|----------|--|------|------|------|---------|
| Reverse Current | I_R | $V_R = 50 V$ | - | - | 0.1 | μA |
| | | $V_R = 50 V$, $T_j = 150^\circ C$ | - | - | 100 | μA |
| Forward Voltage | V_F | $I_F = 100 mA$ | - | - | 0.92 | V |
| | | $I_F = 200 mA$ | - | - | 1.0 | V |
| Diode Capacitance | C_d | $f = 1MHz$; $V_R = 0$ | - | - | 2.5 | pF |
| Reverse Recovery Time | T_{rr} | $I_F = 10 mA$ to 200 mA to $I_R = 10 mA$ to 200 mA; $R_L = 100 \Omega$; measured at $I_R = 0.1 \times I_F$ | - | - | 4 | ns |

RATING AND CHARACTERISTIC CURVES (1N4150)

FIG. 1 MAXIMUM FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

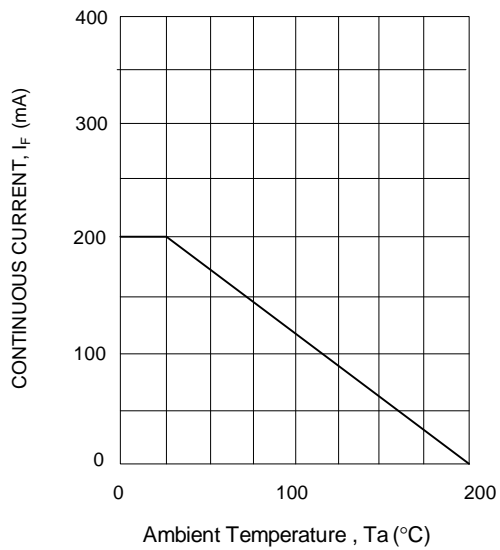


FIG. 2 TYPICAL FORWARD VOLTAGE

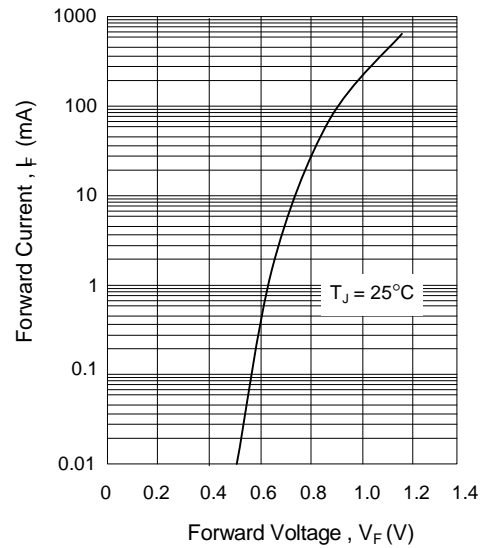


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

