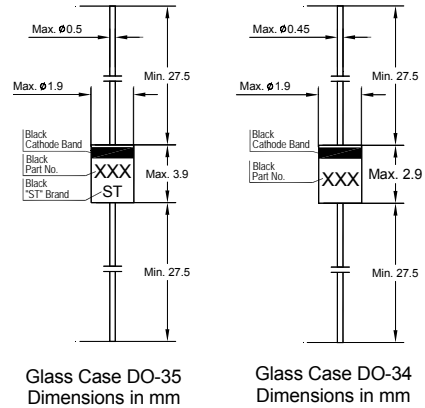


1N4149...1N4454

Silicon Epitaxial Planar Switching Diode

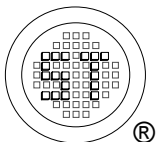
for general purpose and switching



Absolute Maximum Ratings and Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified.)

| Type | Peak Reverse Voltage | Max. Average Rectified Current | Max. Power Dissipation at 25°C | Max. Junction Temp. | Max. Forward Voltage | | Max. Reverse Current | | Max. Reverse Recovery Time | |
|----------------------|----------------------|--------------------------------|--------------------------------|---------------------|----------------------|---------------|----------------------|--------------|----------------------------|--|
| | V_{RM} (V) | $I_{F(AV)}$ (mA) | P_{tot} (mW) ²⁾ | T_j (°C) | V_F (V) | at I_F (mA) | I_R (nA) | at V_R (V) | t_{rr} (ns) | Conditions |
| 1N4149 ¹⁾ | 100 | 150 | 500 | 200 | 1 | 10 | 25 | 20 | 4 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4151 | 75 | 150 | 500 | 200 | 1 | 50 | 50 | 50 | 2 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4152 | 40 | 150 | 400 | 175 | 0.55 | 0.1 | 50 | 30 | 2 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4154 | 35 | 150 | 500 | 200 | 1 | 30 | 100 | 25 | 2 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4447 ¹⁾ | 100 | 150 | 500 | 200 | 1 | 20 | 25 | 20 | 4 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4449 ¹⁾ | 100 | 150 | 500 | 200 | 1 | 30 | 25 | 20 | 4 | $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\ \Omega$, to $I_R = 1\text{ mA}$ |
| 1N4450 | 40 | 150 | 400 | 175 | 0.54 | 0.5 | 50 | 30 | 4 | $I_F = I_R = 10\text{ mA}$, to $I_R = 1\text{ mA}$ |
| 1N4451 | 40 | 150 | 400 | 175 | 0.5 | 0.1 | 50 | 30 | 10 | $I_F = I_R = 10\text{ mA}$, to $I_R = 1\text{ mA}$ |
| 1N4453 | 30 | 150 | 400 | 175 | 0.55 | 0.01 | 50 | 20 | - | - |
| 1N4454 | 75 | 150 | 400 | 175 | 1 | 10 | 100 | 50 | 4 | $I_F = I_R = 10\text{ mA}$, to $I_R = 1\text{ mA}$ |

¹⁾ These diodes are also available in glass case DO-34. Parameter for diodes in case DO-34: $P_{tot} = 300\text{ mW}$, $T_j = 175^\circ\text{C}$
²⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



SEMTECH ELECTRONICS LTD.

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