



ELECTRONICS, INC.

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1N4149 Small Signal Diode

Features:

- DO-35 Package

Absolute Maximum Ratings: ($T_A = +25^{\circ}\text{C}$, Note 1 unless otherwise specified)

Max. Repetitive Reverse Voltage, V_{RRM} 100V

Power Dissipation, P_D 500mW

Average Rectified Forward Current, $I_{F(AV)}$ 500mA

None-Repetitive Forward Surge Current, I_{FSM}

Pulse Width = 1.0 seconds 1.0A

Pulse Width = 1.0 microsecond 4.0A

Operating Junction Temperature, T_J $+175^{\circ}\text{C}$

Storage Temperature Range, T_{stg} -65° to $+200^{\circ}\text{C}$

Thermal Resistance, Junction-to-Ambient, R_{thJA} $+300^{\circ}\text{C/W}$

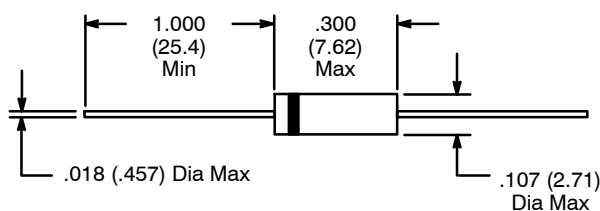
Note 1. These ratings are limiting values above which the serviceability of the device may be impaired.

Note 2. These ratings are based on a maximum junction temperature of $+200^{\circ}\text{C}$.

Note 3. These are steady state limits.

Electrical Characteristics: ($T_A = +25^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_R	$I_R = 100\mu\text{A}$	100	–	–	V
		$I_R = 5\mu\text{A}$	75	–	–	V
Forward Voltage	V_F	$I_F = 10\text{mA}$	–	–	1.0	V
Reverse Current	I_R	$V_R = 20\text{V}$	–	–	25	nA
		$V_R = 20\text{V}$, $T_A = +150^{\circ}\text{C}$	–	–	50	μA
Total Capacitance	C_T	$V_R = 0$, $f = 1\text{MHz}$	–	–	2	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$, $V_R = 6\text{V}$, $I_{rr} = 1\text{mA}$, $R_L = 100\Omega$	–	–	4	ns



Color Band Denotes Cathode