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1N4154 Silicon Rectifier Diode Small Signal Fast Switching DO-35 Type Package

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

Repetitive Peak Reverse Voltage, V_{RRM}	35V
Reverse Voltage, V_R	25V
Peak Forward Surge Current ($t_p = 1\mu\text{s}$), I_{FSM}	2A
Repetitive Peak Forward Current, I_{FRM}	500mA
Forward Continuous Current, I_F	300mA
Average Forward Current ($V_R = 0$), I_{FAV}	150mA
Power Dissipation ($l = 4\text{mm}$), P_V	
$T_L = +45^\circ\text{C}$	440mW
$T_L \leq +25^\circ\text{C}$	500mW
Junction Temperature, T_J	+175°C
Storage Temperature Range, T_{stg}	-65° to +175°C
Thermal Resistance, Junction-to-Ambient ($l = 4\text{mm}$, $T_L = \text{constant}$), R_{thJA}	350K/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 30\text{mA}$	-	0.88	1	V
Reverse Current	I_R	$V_R = 25\text{V}$	-	9	100	nA
		$V_R = 25\text{V}$, $T_J = +150^\circ\text{C}$	-	-	100	μA
Breakdown Voltage	$V_{(BR)}$	$I_R = 5\mu\text{A}$, Note 1	35	-	-	V
Diode Capacitance	C_D	$V_R = 0$, $f = 1\text{MHz}$, $V_{HF} = 50\text{mV}$	-	-	4	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $i_R = 1\text{mA}$	-	-	4	ns
		$I_F = 10\text{mA}$, $V_R = 6\text{V}$, $i_R = 0.1 \cdot I_R$, $R_L = 100\Omega$	-	-	2	ns

Note 1. $\frac{t_p}{T} = 0.01$, $t_p = 0.3\text{ms}$

