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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	$\mu\text{A}$
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.  $\frac{t_p}{T} = 0.01$ ,  $t_p = 0.3\text{ms}$

