

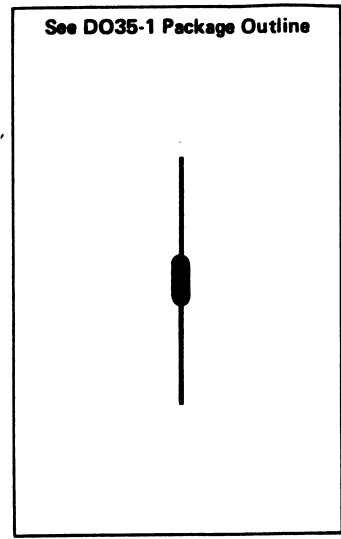
20 STERN AVE.  
 SPRINGFIELD, NEW JERSEY 07081  
 U.S.A.

TELEPHONE: (973) 376-2922  
 (212) 227-6005  
 FAX: (973) 376-8960

**1N4151 • 1N4152 • 1N4153 • 1N4154**

**ULTRA HIGH SPEED**  
 SILICON PLANAR\* EPITAXIAL DIODES

- C ... 4 pF @  $V_R = 0$ ,  $f = 1.0$  MHz
- $t_{rr}$  ... 2.0 ns @  $I_F = 10$  mA,  $V_R = -6.0$  V,  $R_L = 100 \Omega$



**ABSOLUTE MAXIMUM RATINGS (Note 1)**

Maximum Temperature				
Storage Temperature				-65°C to +200°C
Lead Temperature (20 seconds)				300°C
Maximum Power Dissipation (Note 2)				
	<b>1N4151</b>	<b>1N4152</b>	<b>1N4153</b>	<b>1N4154</b>
Total Dissipation at 25°C Ambient Temperature	500 mW	500 mW	500 mW	500 mW
Linear Derating Factor	2.85 mW/°C	2.85 mW/°C	2.85 mW/°C	2.85 mW/°C
Maximum Voltage				
$V_R$ Reverse Voltage	75 V	40 V	75 V	35 V

**ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)**

SYMBOL	CHARACTERISTIC	MIN.	MAX.	UNITS	TEST CONDITIONS		
$V_F$	Forward Voltage	1N4154		1.0	V	$I_F = 30$ mA	
		1N4151		1.0	V	$I_F = 50$ mA	
		1N4152 & 1N4153	0.49	0.55	V	$I_F = 0.1$ mA	
			0.53	0.59	V	$I_F = 0.25$ mA	
			0.59	0.67	V	$I_F = 1.0$ mA	
			0.62	0.70	V	$I_F = 2.0$ mA	
			0.70	0.81	V	$I_F = 10$ mA	
			0.74	0.88	V	$I_F = 20$ mA	
$I_R$	Reverse Current	1N4154		0.1	$\mu$ A	$V_R = 25$ V	
				100	$\mu$ A	$V_R = 25$ V, $T_A = 150^\circ$ C	
		1N4153 } 1N4151 }		0.05	$\mu$ A	$V_R = 50$ V	
				50	$\mu$ A	$V_R = 50$ V, $T_A = 150^\circ$ C	
		1N4152		0.05	$\mu$ A	$V_R = 30$ V	
BV	Breakdown Voltage	1N4154	35		V	$I_R = 5.0$ $\mu$ A	
		1N4153 } 1N4151 }		75		V	$I_R = 5.0$ $\mu$ A
		1N4152		40		V	$I_R = 5.0$ $\mu$ A
$t_{rr}$	Reverse Recovery Time			4.0	ns	$I_f = 10$ mA, $I_r = 10$ mA (Note 3)	
				2.0	ns	$I_f = 10$ mA	
C	Capacitance		4.0	pF	$V_r = -6.0$ V, $R_L = 100 \Omega$ $V_R = 0$ , $f = 1.0$ MHz		