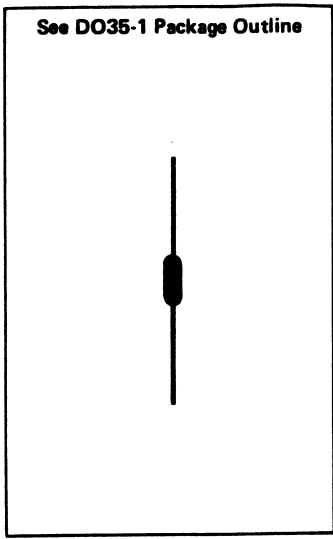


1N4151 • 1N4152 • 1N4153 • 1N4154

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)				
	1N4151	1N4152	1N4153	1N4154
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	μ A	$V_R = 25$ V	
			100	μ A	$V_R = 25$ V, $T_A = 150^\circ$ C	
		1N4153 } 1N4151 }	0.05	μ A	$V_R = 50$ V	
			50	μ A	$V_R = 50$ V, $T_A = 150^\circ$ C	
		1N4152	0.05	μ A	$V_R = 30$ V	
BV	Breakdown Voltage	1N4154	35	V	$V_R = 30$ V, $T_A = 150^\circ$ C	
		1N4153 } 1N4151 }	75	V	$I_R = 5.0$ μ A	
		1N4152	40	V	$I_R = 5.0$ μ A	
			40	V	$I_R = 5.0$ μ A	
t_{rr}	Reverse Recovery Time		4.0	ns	$I_f = 10$ mA,	
			2.0	ns	$I_r = 10$ mA (Note 3)	
C	Capacitance		4.0	pF	$I_f = 10$ mA	
					$V_r = -6.0$ V, $R_L = 100 \Omega$	
					$V_R = 0$, $f = 1.0$ MHz	