

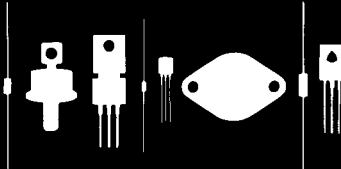
Central
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145 Adams Avenue
Hauppauge, New York 11788



1N4151 THRU 1N4154

SILICON SWITCHING DIODE

JEDEC DO-35 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N4151 Series types are Hermetically Sealed Silicon Diodes designed for fast switching applications.

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL	1N4151	1N4152	1N4153	1N4154	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	75	40	75	35	V
Peak Working Reverse Voltage	V_{RWM}	50	30	50	25	V
Average Forward Current	I_O	150	150	150	150	mA
Peak Forward Surge Current	I_{FSM}	1000	1000	1000	1000	mA
Power Dissipation	P_D	500	500	500	500	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +200				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	1N4151		1N4152		1N4153		1N4154		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
BV_R	$I_R=5.0\mu\text{A}$	75		40		75		35		V
I_R	$V_R=\text{Rated } V_{RWM}$		0.05		0.05		0.05		0.1	μA
I_R	$V_R=\text{Rated } V_{RWM}, T_A=150^\circ\text{C}$		50		50		50		100	μA
V_F	$I_F=0.1\text{mA}$			0.49	0.55	0.49	0.55			V
V_F	$I_F=0.25\text{mA}$			0.53	0.59	0.53	0.59			V
V_F	$I_F=1.0\text{mA}$			0.59	0.67	0.59	0.67			V
V_F	$I_F=2.0\text{mA}$			0.62	0.70	0.62	0.70			V
V_F	$I_F=10\text{mA}$			0.70	0.81	0.70	0.81			V
V_F	$I_F=20\text{mA}$			0.74	0.88	0.74	0.88			V
V_F	$I_F=30\text{mA}$								1.0	V
V_F	$I_F=50\text{mA}$		1.0							V
C_T	$V_R=0, f=1.0\text{MHz}$		2.0		2.0		2.0		4.0	pF
t_{rr}	$I_F=10\text{mA}, I_{RM}=10\text{mA},$ $i_{rr}=1.0\text{mA}, R_L=100\Omega$		4.0		4.0		4.0		4.0	ns
t_{rr}	$I_F=10\text{mA}, I_{RM}=6\text{mA},$ $i_{rr}=1.0\text{mA}, R_L=100\Omega$		2.0		2.0		2.0		2.0	ns

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