

1N4151



DO-35
Color Band Denotes Cathode

Small Signal Diode

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	75	V
I _{F(AV)}	Average Rectified Forward Current	150	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	0.5	A
		2.0	A
T _{stg}	Storage Temperature Range	-65 to +175	°C
T _J	Operating Junction Temperature	175	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	500	mW
R _{θJA}	Thermal Resistance, Junction to Ambient	300	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V _R	Breakdown Voltage	I _R = 5.0 μA	75		V
V _F *	Forward Voltage	I _F = 50 mA		1.0	V
I _R *	Reverse Current	V _R = 50 V		50	nA
		V _R = 50 V, T _A = 150°C		50	μA
C _T	Total Capacitance	V _R = 0 V, f = 1.0 MHz		2.0	pF
t _{rr1}	Reverse Recovery Time	I _F = I _R = 10 mA, I _{RR} = 1.0 mA, R _L = 100Ω		4.0	ns
t _{rr2}	Reverse Recovery Time	I _F = 10 mA, V _R = 6.0 V, R _L = 100Ω		2.0	ns

*Pulse test : Pulse width=300us, Duty Cycle=2%

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