

December 2004

# **1N3064** Small Signal Diode



DO-35 Color Band Denotes Cathode

## Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	75	V	
I <sub>F(AV)</sub>	Average Rectified Forward Current	300	mA	
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge CurrentPulse Width = 1.0 secondPulse Width = 1.0 microsecond4.0		A A	
T <sub>STG</sub>	Storage Temperature Range	-65 to +200	°C	
TJ	Operating Junction Temperature	175	°C	

\* These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:

1) These ratings are based on a maximum junction temperature of 200 degrees C.

2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### **Thermal Characteristics**

Symbol	Parameter	Value	Unit
P <sub>D</sub>	Power Dissipation	500	mW
$R_{ extsf{ heta}JA}$	Thermal Resistance, Junction to Ambient	300	°C/W

Electrical Characteristics T<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 5μA	75		V
V <sub>F</sub>	Forward Voltage	$I_{F} = 250\mu A$ $I_{F} = 1mA$ $I_{F} = 2mA$ $I_{F} = 10mA$	505 550 610	575 650 710 1.0	mV mV mV V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 50V V <sub>R</sub> = 50V, T <sub>A</sub> = 150°C		100 100	nA μA
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 0, f = 1.0MHz		2	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_{F} = I_{R} = 10$ mA, $R_{L} = 100\Omega$ , $I_{rr} = 1$ mA		4	ns

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