

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

1N3070

HIGH VOLTAGE
SILICON SWITCHING DIODE

JEDEC DO-35 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N3070 is a High Speed Silicon Switching Diode designed for computer and general purpose applications requiring a high breakdown voltage. For higher voltage devices refer to CSSD2003 data sheet.

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

	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	175	V
Peak Working Reverse Voltage	V_{RWM}	175	V
Average Forward Current	I_O	200	mA
Forward Steady-State Current	I_F	500	mA
Peak Recurrent Forward Current	I_f	600	mA
Peak Forward Surge Current Pulse Width = 1.0s	I_{FSM}	1.0	A
Pulse Width = 1.0 μ s	I_{FSM}	4.0	A
Power Dissipation	P_D	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)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
I_R	$V_R = 175\text{V}$		100	nA
I_R	$V_R = 175\text{V}, T_A = 150^\circ\text{C}$		100	μA
BV_R	$I_R = 100\mu\text{A}$	200		V
V_F	$I_F = 100\text{mA}$		1.0	V
C_T	$V_r = 0, f = 1.0\text{MHz}$		5.0	pF
t_{rr}	$I_f = I_r = 30\text{mA}, R_L = 100\Omega, \text{Recovery to } 1.0\text{mA}$		50	ns