

# Central<sup>TM</sup> Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA

Tel: (631) 435-1110 • Fax: (631) 435-1824

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 $\mu$ 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	$\mu\text{A}$
$BV_R$	$I_R = 100\mu\text{A}$	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

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centalsemi.com](http://www.centalsemi.com)

**Worldwide Field Representatives:**  
[www.centalsemi.com/wwreps](http://www.centalsemi.com/wwreps)

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[www.centalsemi.com/wwdistributors](http://www.centalsemi.com/wwdistributors)

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