

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA

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

Manufacturers of World Class Discrete Semiconductors

1N5820

1N5821

1N5822

SCHOTTKY BARRIER RECTIFIER

JEDEC DO-201AD CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N5820 Series types are Schottky Barrier Rectifiers mounted in an axial lead epoxy case using metal to silicon junction to yield low forward voltage drop and instantaneous reverse recovery times.

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

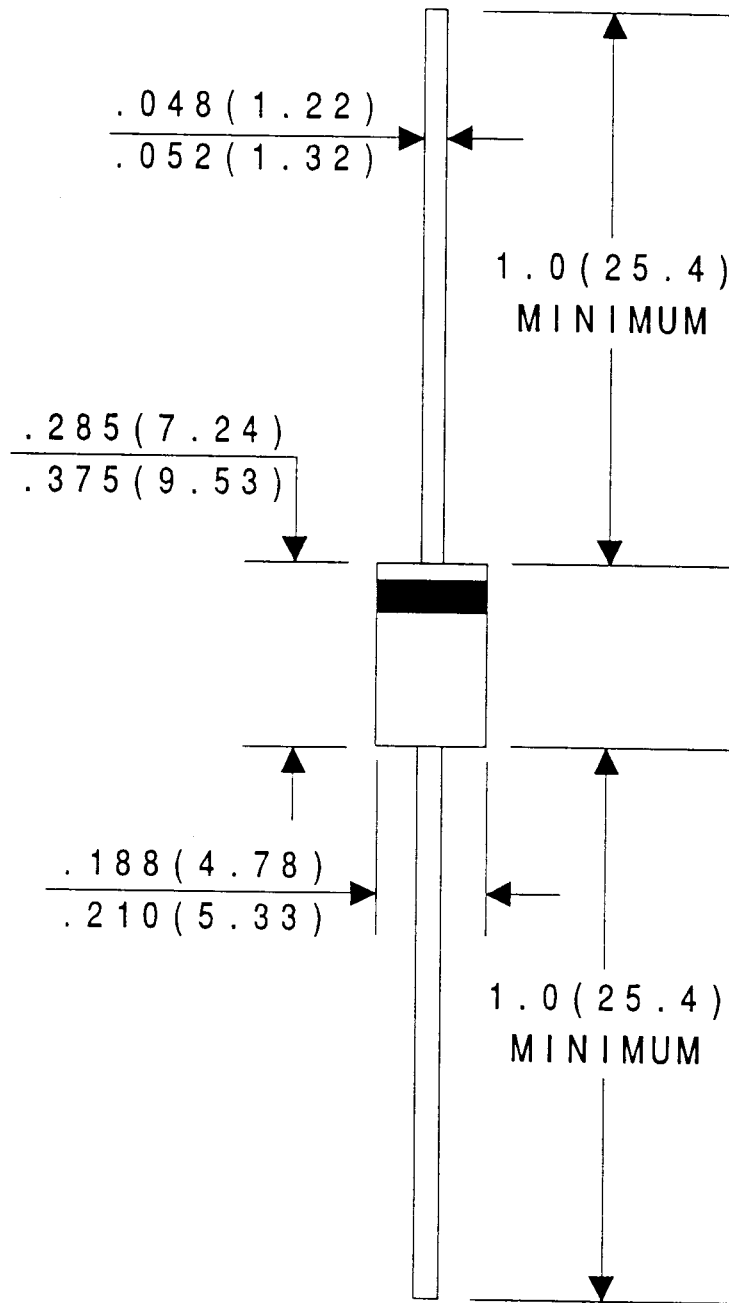
	<u>SYMBOL</u>	<u>1N5820</u>	<u>1N5821</u>	<u>1N5822</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V
DC Blocking Voltage	V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Forward Current	I_O		3.0		A
Peak Forward Surge Current	I_{FSM}		80		A
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-65 to +150		$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}		28		$^{\circ}\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>1N5820</u>		<u>1N5821</u>		<u>1N5822</u>		<u>UNITS</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
I_R	$V_R=\text{Rated } V_{RRM}$		2.0		2.0		2.0	mA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^{\circ}\text{C}$		20		20		20	mA
V_F	$I_F=3.0\text{A}$		0.475		0.500		0.525	V
V_F	$I_F=9.4\text{A}$		0.850		0.900		0.950	V

(SEE REVERSE FOR OUTLINE DRAWING)

JEDEC D0-201AD CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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