

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.

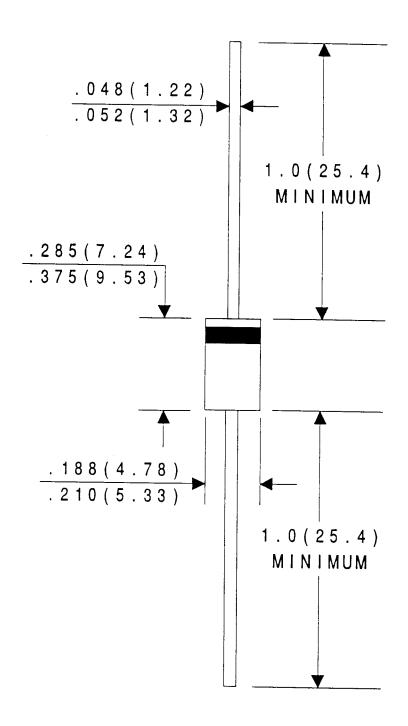
MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	<u>1N5820</u>	<u>1N5821</u>	1N5822	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	V
DC Blocking Voltage	$V_{R}$	20	30	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	V
Average Forward Current	1 <sub>0</sub> ` ′		3.0		Α
Peak Forward Surge Current	<sup>I</sup> FSM		80		Α
Operating and Storage					
Junction Temperature	$T_{J}, T_{stg}$		-65 to +150		°C
Thermal Resistance	$\Theta_{JA}$		28		°C/W

# ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL TEST CONDITIONS		<u>1N5820</u>		<u>1N5821</u>		<u>1N5822</u>		
	MIN	MAX	MIN	MAX	MIN	MAX	<u>UNITS</u>	
<sup>I</sup> R	V <sub>R</sub> =Rated V <sub>RRM</sub>		2.0		2.0		2.0	mA
lR	$V_R$ =Rated $V_{RRM}$ , $T_A$ =100°C		20		20		20	mA
٧F	I <sub>F</sub> =3.0A		0.475		0.500		0.525	V
VF	I <sub>F</sub> =9.4A		0.850		0.900		0.950	V

(SEE REVERSE FOR OUTLINE DRAWING)



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 guick 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

#### 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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)