

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

145 Adams Avenue, Hauppauge, NY 11788 USA  
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Manufacturers of World Class Discrete Semiconductors

## CN5823 SERIES

SCHOTTKY BARRIER RECTIFIER  
5.0 AMP, 20 THRU 40 VOLTS

JEDEC DO-201AD CASE

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CN5823 Series types are Schottky Barrier Rectifiers mounted in an axial lead epoxy case using a metal to silicon junction to yield low forward voltage drop and an instantaneous reverse recovery times.

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

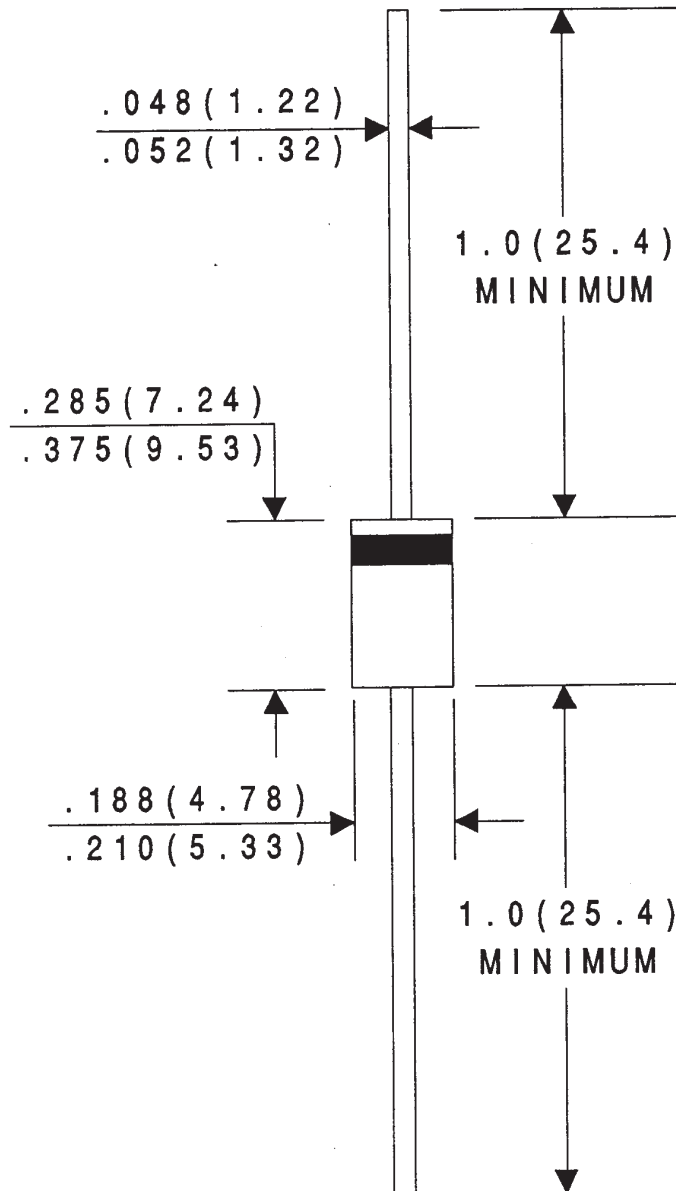
	<u>SYMBOL</u>	<u>CN5823</u>	<u>CN5824</u>	<u>CN5825</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	V
DC Blocking Voltage	$V_R$	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Forward Current ( $T_A=100^\circ\text{C}$ )	$I_O$		5.0		A
Peak Forward Surge Current	$I_{FSM}$		250		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
$I_R$	$V_R=\text{Rated } V_{RRM}$			10	mA
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$			100	mA
$V_F$	$I_F=3.0\text{A}$			0.42	V
$V_F$	$I_F=5.0\text{A}$			0.45	V
$V_F$	$I_F=15.7\text{A}$			0.65	V

(SEE REVERSE FOR MECHANICAL OUTLINE)

# JEDEC DO-201AD CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm)

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



## 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

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