

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

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)

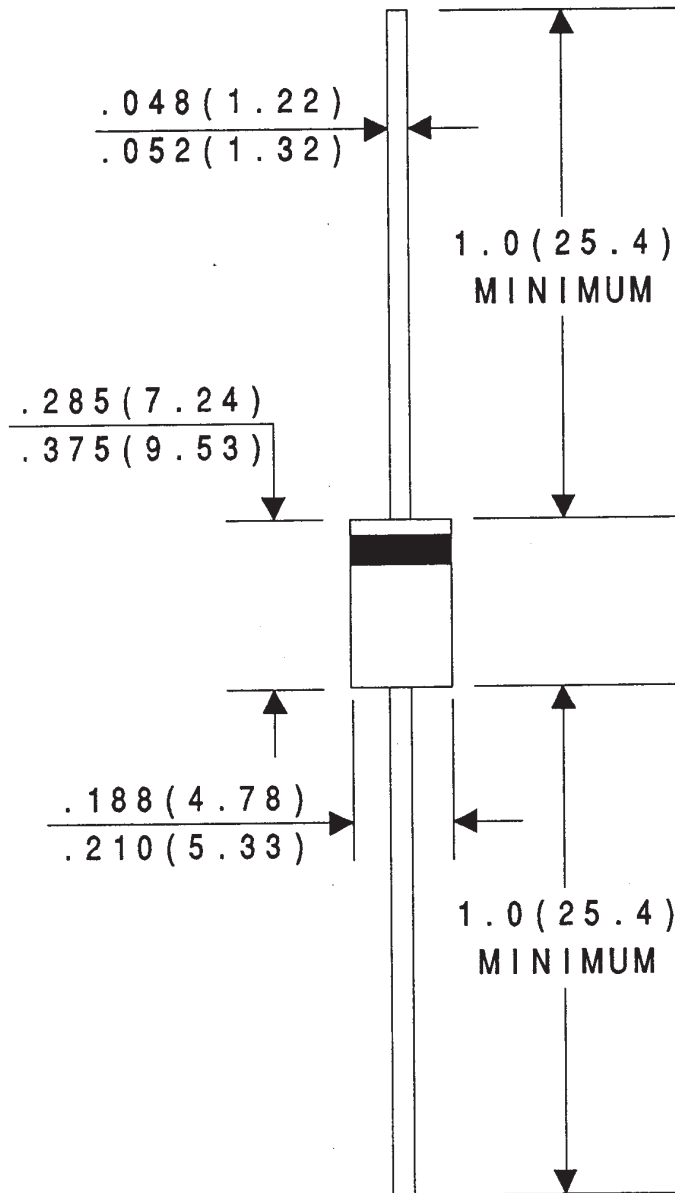
	<u>SYMBOL</u>	<u>CN5823</u>	<u>CN5824</u>	<u>CN5825</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V
DC Blocking Voltage	V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Forward Current ($T_A=100^\circ\text{C}$)	I_O		5.0		A
Peak Forward Surge Current	I_{FSM}		250		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[™]
Semiconductor Corp.

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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