	Data Sheet
Central <sup>™</sup> Semiconductor Corp. 145 Adams Avenue, Hauppauge, NY 11788 USA Tel: (631) 435-1110 • Fax: (631) 435-1824	CDH300 CDH333 SILICON LOW LEAKAGE DIODE JEDEC DO-35 CASE
Manufacturers of World Class Discrete Semiconductors	

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CDH300, CDH333 types are epitaxial planar silicon diodes designed for low leakage, high conductance applications. Higher breakdown voltage devices are available on special order.

MAXIMUM RATING (TA=25°C)

	SYMBOL		UNIT
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	150	v
Peak Working Reverse Voltage	VRWM	125	V
Average Forward Current	10	200	mA
Forward Steady-State Current	l <sub>F</sub>	500	mA
Recurrent Peak Forward Current	if	600	mA
Peak Forward Surge Current (1.0s pulse)	FSM	1000	mA
Peak Forward Surge Current (1.0µs pulse)	IFSM	4000	mA
Power Dissipation	PD	500	тW
Operating and Storage		· · · · · · · · · · · · · · · · · · ·	
Junction Temperature	⊺j, ⊺stg	-65 TO +200	°C

# ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

		CDH300	CDH	1333	
SYMBOL	TEST CONDITIONS	MIN MAX	MIN	MAX	UNIT
R	V <sub>R</sub> =125V	1.0		3.0	nA
I <sub>R</sub>	$V_{R}=125V, T_{A}=100^{\circ}C$	-		500	nA
R	$V_{R}=125V, T_{A}=150^{\circ}C$	3.0		-	μA
BVR	Ι <sub>R</sub> =100μΑ	150	150		V
VF	I <sub>F</sub> =1.0mA	0.70		-	V
VF	I <sub>F</sub> =5.0mA	0.78		-	V
۷ <sub>F</sub>	I <sub>F</sub> =10mA	0.80		-	V
۷ <sub>F</sub>	I <sub>F</sub> =50mA	0.88	0.80	0.89	V
٧F	I <sub>F</sub> =100mA	0.92	0.83	0.94	V
۷F	I <sub>F</sub> =150mA		0.86	0.97	V
٧ <sub>F</sub>	I <sub>F</sub> =200mA	1.0	0.87	1.05	V
۷ <sub>F</sub>	I <sub>F</sub> =250mA	-	0.88	1.08	V
۷ <sub>F</sub>	I <sub>F</sub> =300mA	-	0.90	1.15	V
C	V <sub>R</sub> =0V	6.0		6.0	рF
trr	F= R=10mA, Recov. to 1.0mA	1.0 TYP 3.0	1.0 TYP	3.0	μs

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# **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

#### **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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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).
- 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**

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Product End of Life Notification

PDN ID:	PDN01207
Notification Date:	2/01/22
Last Buy Date:	8/01/22
Last Shipment Date	2/01/23

Summary: The following switching diodes are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

## \* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.

Central Part Number	Suggested Replacement
CDH333 BK	N/A
CDH333 TR	N/A
1N3595 BK	N/A
1N3595 TR	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.