	Data Sheet		
Central ™ 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	CDI	CDH333	
SYMBOL	TEST CONDITIONS	MIN MAX	MIN	MAX	UNIT
R	V <sub>R</sub> =125V	1.0		3.0	nA
I <sub>R</sub>	V <sub>R</sub> =125V, T <sub>A</sub> =100°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
۷F	I <sub>F</sub> =100mA	0.92	0.83	0.94	V
۷ <sub>F</sub>	I <sub>F</sub> =150mA		0.86	0.97	V
۷ <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	IF=IR=10mA, Recov. to 1.0mA	1.0 TYP 3.0	1.0 TYP	3.0	μs

# 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 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

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

## REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. 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**

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Authorized Distributor

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