

Central™

Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CDH300
CDH333

SILICON LOW LEAKAGE DIODE

JEDEC DO-35 CASE

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 (T_A=25°C)

	<u>SYMBOL</u>		<u>UNIT</u>
Peak Repetitive Reverse Voltage	V _{RRM}	150	V
Peak Working Reverse Voltage	V _{RWM}	125	V
Average Forward Current	I _O	200	mA
Forward Steady-State Current	I _F	500	mA
Recurrent Peak Forward Current	i _f	600	mA
Peak Forward Surge Current (1.0s pulse)	I _{FSM}	1000	mA
Peak Forward Surge Current (1.0μs pulse)	I _{FSM}	4000	mA
Power Dissipation	P _D	500	mW
Operating and Storage			
Junction Temperature	T _J , T _{STG}	-65 TO +200	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>CDH300</u>		<u>CDH333</u>		<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
I _R	V _R =125V		1.0		3.0	nA
I _R	V _R =125V, T _A =100°C		-		500	nA
I _R	V _R =125V, T _A =150°C		3.0		-	μA
B _{VR}	I _R =100μA	150		150		V
V _F	I _F =1.0mA		0.70		-	V
V _F	I _F =5.0mA		0.78		-	V
V _F	I _F =10mA		0.80		-	V
V _F	I _F =50mA		0.88	0.80	0.89	V
V _F	I _F =100mA		0.92	0.83	0.94	V
V _F	I _F =150mA		-	0.86	0.97	V
V _F	I _F =200mA		1.0	0.87	1.05	V
V _F	I _F =250mA		-	0.88	1.08	V
V _F	I _F =300mA		-	0.90	1.15	V
C	V _R =0V		6.0		6.0	pF
t _{rr}	I _F =I _R =10mA, Recov. to 1.0mA	1.0 TYP	3.0	1.0 TYP	3.0	μs