

New Jersey Semi-Conductor Products, Inc.

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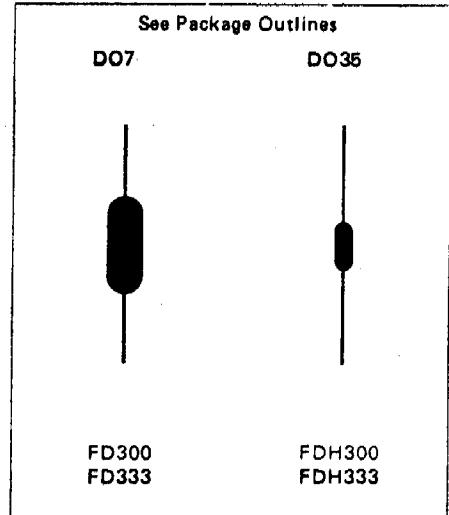
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# FD300 • FD333 • FDH300 • FDH333

HIGH CONDUCTANCE LOW LEAKAGE  
DIFFUSED SILICON PLANAR DIODES

## ABSOLUTE MAXIMUM RATINGS

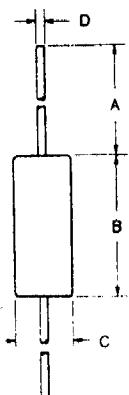
Maximum Temperatures		-65°C to +200°C	
Storage Temperature		175°C	
Operating Temperature			
Maximum Power Dissipation (Notes 2 & 3)		FD300, FD333	FDH300, FDH333
Total Dissipation at 25°C Ambient Temperature		400 mW	500 mW
Linear Derating Factor		2.67 mW/°C	3.33 mW/°C
Maximum Voltages and Currents			
WIV	Working Inverse Voltage	125 V	125 V
I <sub>O</sub>	Average Rectified Current	150 mA	200 mA
I <sub>F</sub>	Forward Current Steady State	375 mA	500 mA
I <sub>f</sub>	Recurrent Peak Forward Current	450 mA	600 mA
I <sub>f(surge)</sub>	Peak Forward Surge Current Pulse Width = 1.0 s Pulse Width = 1.0 μs	500 mA 4000 mA	1000 mA 4000 mA



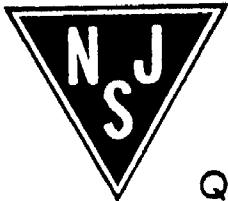
## ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC	FD300, FDH300 MIN. MAX.	FD333, FDH333 MIN. MAX.	UNITS	TEST CONDITIONS
V <sub>F</sub>	Forward Voltage	0.9 0.88 1.0 0.87 0.86 0.92 0.88 0.80 0.8 0.75 0.68	1.15	V	I <sub>F</sub> = 300 mA
			1.08	V	I <sub>F</sub> = 250 mA
			1.05	V	I <sub>F</sub> = 200 mA
			0.97	V	I <sub>F</sub> = 150 mA
			0.94	V	I <sub>F</sub> = 100 mA
			0.89	V	I <sub>F</sub> = 50 mA
			-	V	I <sub>F</sub> = 10 mA
			-	V	I <sub>F</sub> = 5.0 mA
			-	V	I <sub>F</sub> = 1.0 mA
			3.0	nA	V <sub>R</sub> = -125 V
I <sub>R</sub>	Reverse Current	1.0 3.0	500	nA μA	V <sub>R</sub> = -125 V, T <sub>A</sub> = 150°C
C	Capacitance	6.0	6.0	pF	V <sub>R</sub> = -125 V, T <sub>A</sub> = 100°C
BV	Breakdown Voltage	150	150	V	V <sub>R</sub> = 0 I <sub>R</sub> = 100 μA

## DO35



DIM.	INCHES			MILLIMETERS		
	MIN.	typ.	MAX.	MIN.	typ.	MAX.
A	1.0			25.40		
B		.180			4.57	
C		.075				1.91
D	.020			0.508		



Quality Semi-Conductors