

FDH3595



DO-35

High Conductance Low Leakage Diode

Sourced from Process 1M. See MMBD1501-1505 for characteristics.

Absolute Maximum Ratings*

TA = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
W_{IV}	Working Inverse Voltage	125	V
I_O	Average Rectified Current	200	mA
I_F	DC Forward Current	500	mA
i_f	Recurrent Peak Forward Current	600	mA
$i_{f(surge)}$	Peak Forward Surge Current Pulse width = 1.0 second Pulse width = 1.0 microsecond	1.0 4.0	A A
T_{stg}	Storage Temperature Range	-65 to +175	°C
T_J	Operating Junction Temperature	175	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

TA = 25°C unless otherwise noted

Symbol	Characteristic	Max	Units
		MMBD7000*	
P_D	Total Device Dissipation Derate above 25°C	500	mW
		3.33	mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W

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(continued)

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Electrical Characteristics TA = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
B _V	Breakdown Voltage	I _R = 100 μA	150		V
I _R	Reverse Voltage Leakage Current	V _R = 125 V V _R = 30 V, T _A = 125°C V _R = 125 V, T _A = 125°C V _R = 125 V, T _A = 150°C		1.0 300 500 3.0	nA nA nA μA
V _F	Forward Voltage	I _F = 1.0 mA I _F = 5.0 mA I _F = 10 mA I _F = 50 mA I _F = 100 mA I _F = 200 mA	520 600 650 750 790 0.83	680 760 800 890 920 1.0	mV mV mV mV mV V
C _T	Diode Capacitance	V _R = 0, f = 1.0 MHz		8.0	pF

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Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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