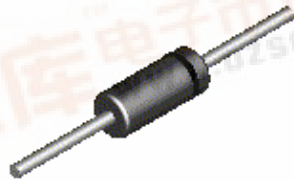




Discrete POWER & Signal Technologies

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	1.0	A
	Pulse width = 1.0 microsecond	4.0	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



High Conductance Low Leakage Diode

(continued)

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

FDH3595

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Definition of Terms

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