

FDH3595



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
lo	Average Rectified Current	200	mA
I _F	DC Forward Current	500	mA
İf	Recurrent Peak Forward Current	600	mA
İ _{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
TJ	Operating Junction Temperature	175	°C

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

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	500	mW
	Derate above 25°C	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		٧
I _R	Reverse Voltage Leakage Current	$V_R = 125 \text{ V}$ $V_R = 30 \text{ V}, T_A = 125^{\circ}\text{C}$ $V_R = 125 \text{ V}, T_A = 125^{\circ}\text{C}$ $V_R = 125 \text{ V}, T_A = 150^{\circ}\text{C}$		1.0 300 500 3.0	nA nA nA μA
V _F	Forward Voltage	$I_F = 1.0 \text{ mA}$ $I_F = 5.0 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 50 \text{ mA}$ $I_F = 100 \text{ mA}$ $I_F = 200 \text{ mA}$	520 600 650 750 790 0.83	680 760 800 890 920 1.0	mV mV mV mV
C _T	Diode Capacitance	V _R = 0, f = 1.0 MHz		8.0	pF

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