

High Conductance Low Leakage Diode

FDH3595

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

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Symbol	Rating	Value	Unit
W _{IV}	Working Inverse Voltage	125	V
Io	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 s Pulse width = 1.0 μs	1.0 4.0	Α
T _{stg}	T _{stg} Storage Temperature Range		°C
TJ	Operating Junction Temperature	175	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

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

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

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

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

AXIAL LEAD (DO-35) CASE 017AG

MARKING DIAGRAM



H3595 = Specific Device Code

XY = Date Code Band Color: Silver

ORDERING INFORMATION

Device	Package	Shipping
FDH3595	AXIAL LEAD	5000 Units / Bulk

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

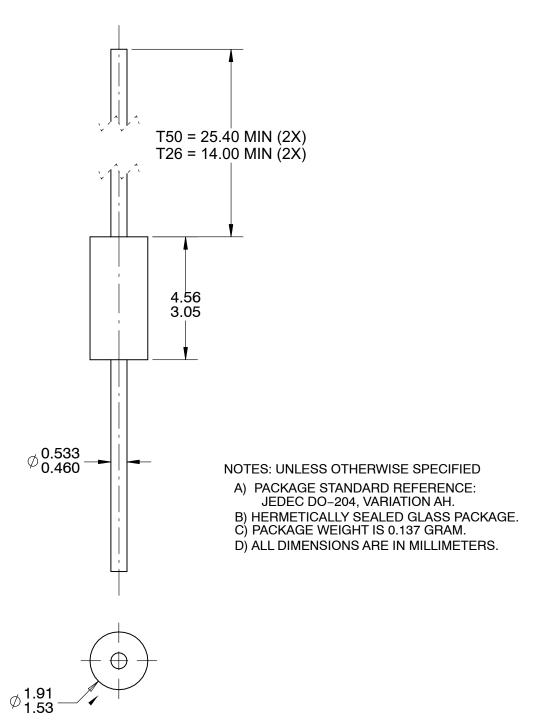
Symbol	Characteristic	Test Conditions	Min	Тур	Max	Unit
B _V	Breakdown Voltage	I _R = 100 μA	150	-	-	V
I _R	Reverse Voltage Leakage Current	V _R = 125 V V _R = 30 V, T _A = 125°C V _R = 125 V, T _A = 125°C V _R = 125 V, T _A = 150°C	- - - -	- - - -	1.0 300 500 3.0	nA nA nA μA
V _F	Forward Voltage	$I_F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

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.



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