

# High Conductance Low Leakage Diode

## FDH3595

Sourced from Process 1M. See [MMBD1501](#)–1505 for characteristics.



AXIAL LEAD  
(DO-35)  
CASE 017AG

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Rating	Value	Unit
W <sub>IV</sub>	Working Inverse Voltage	125	V
I <sub>o</sub>	Average Rectified Current	200	mA
I <sub>F</sub>	DC Forward Current	500	mA
i <sub>f</sub>	Recurrent Peak Forward Current	600	mA
i <sub>f(surge)</sub>	Peak Forward Surge Current Pulse width = 1.0 s Pulse width = 1.0 μs	1.0 4.0	A
T <sub>stg</sub>	Storage Temperature Range	-65 to +175	°C
T <sub>J</sub>	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.

- 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.

### MARKING DIAGRAM



H3595 = Specific Device Code  
XY = Date Code  
Band Color: Silver

### ORDERING INFORMATION

Device	Package	Shipping
FDH3595	AXIAL LEAD	5000 Units / Bulk

### THERMAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Characteristics	Max	Unit
		<a href="#">MMBD7000*</a>	
P <sub>D</sub>	Total Device Dissipation Derate above 25°C	500	mW
		3.33	mW/°C
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	300	°C/W

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

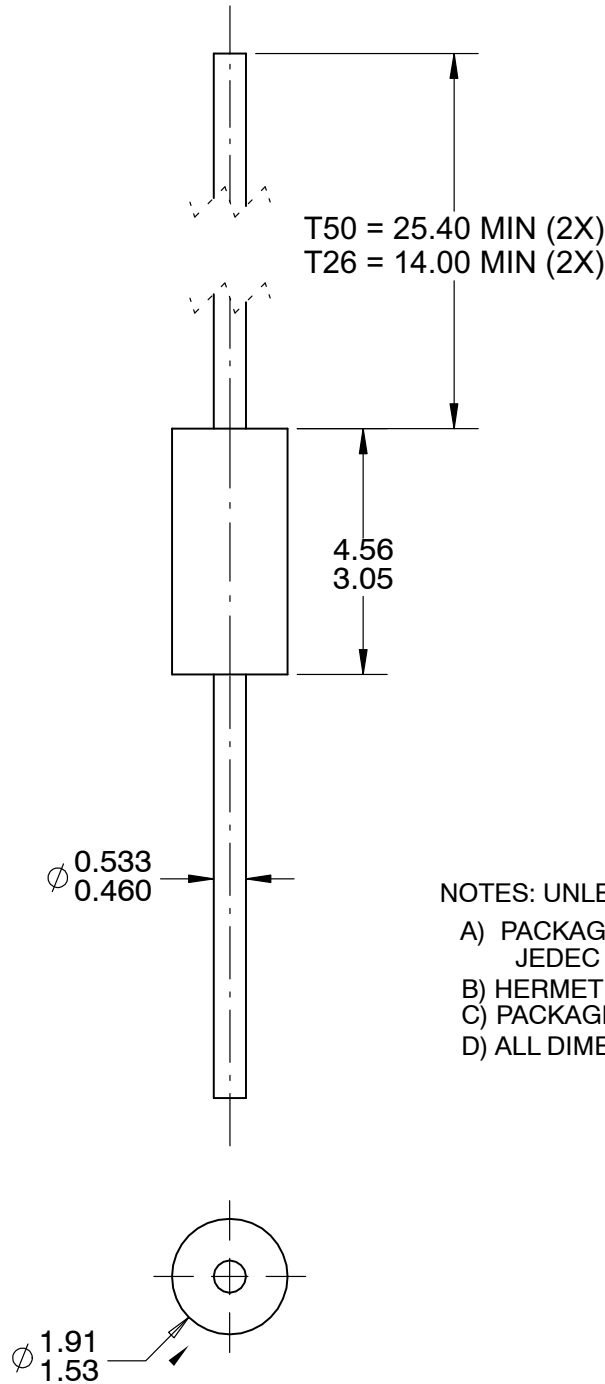
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Characteristic	Test Conditions	Min	Typ	Max	Unit
B <sub>V</sub>	Breakdown Voltage	I <sub>R</sub> = 100 μA	150	-	-	V
I <sub>R</sub>	Reverse Voltage Leakage Current	V <sub>R</sub> = 125 V	-	-	1.0	nA
		V <sub>R</sub> = 30 V, T <sub>A</sub> = 125°C	-	-	300	nA
		V <sub>R</sub> = 125 V, T <sub>A</sub> = 125°C	-	-	500	nA
		V <sub>R</sub> = 125 V, T <sub>A</sub> = 150°C	-	-	3.0	μA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 1.0 mA	520	-	680	mV
		I <sub>F</sub> = 5.0 mA	600	-	760	mV
		I <sub>F</sub> = 10 mA	650	-	800	mV
		I <sub>F</sub> = 50 mA	750	-	890	mV
		I <sub>F</sub> = 100 mA	790	-	920	mV
		I <sub>F</sub> = 200 mA	0.83	-	1.0	V
C <sub>T</sub>	Diode Capacitance	V <sub>R</sub> = 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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- NOTES: UNLESS OTHERWISE SPECIFIED
- A) PACKAGE STANDARD REFERENCE: JEDEC DO-204, VARIATION AH.
  - B) HERMETICALLY SEALED GLASS PACKAGE.
  - C) PACKAGE WEIGHT IS 0.137 GRAM.
  - D) ALL DIMENSIONS ARE IN MILLIMETERS.

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