

# Small Signal Diode

## FDH444

### Features

- This is a Pb-Free and Halide Free Device

### ABSOLUTE MAXIMUM RATINGS

(Values are at  $T_A = 25^\circ\text{C}$  unless otherwise noted.) (Notes 1 and 2)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Working Inverse Voltage	150	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-Repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 microsecond	1.0 4.0	A A
$T_{STG}$	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	175	$^\circ\text{C}$

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  $200^\circ\text{C}$ .
- These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### THERMAL CHARACTERISTICS

Symbol	Parameter	Value	Unit
$P_D$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

### ELECTRICAL CHARACTERISTICS (Values are at $T_A = 25^\circ\text{C}$ unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
$V_R$	Breakdown Voltage	$I_R = 100 \mu\text{A}$	150	–	V
$V_F$	Forward Voltage	$I_F = 200 \text{ mA}$	–	1.1	V
		$I_F = 300 \text{ mA}$	–	1.2	V
$I_R$	Reverse Current	$V_R = 100 \text{ V}$	–	50	nA
		$V_R = 100 \text{ V}, T_A = 150^\circ\text{C}$	–	100	$\mu\text{A}$
$C_T$	Total Capacitance	$V_R = 0, f = 1.0 \text{ MHz}$	–	2.5	pF
$t_{rr}$	Reverse Recovery Time	$I_F = I_R = 30 \text{ mA}$ , $R_L = 100 \Omega, I_{rr} 3.0 \text{ mA}$	–	60	ns

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.



AXIAL LEAD  
CASE 017AG

### MARKING DIAGRAM

FD H4 44
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FDH444 = Specific Device Code

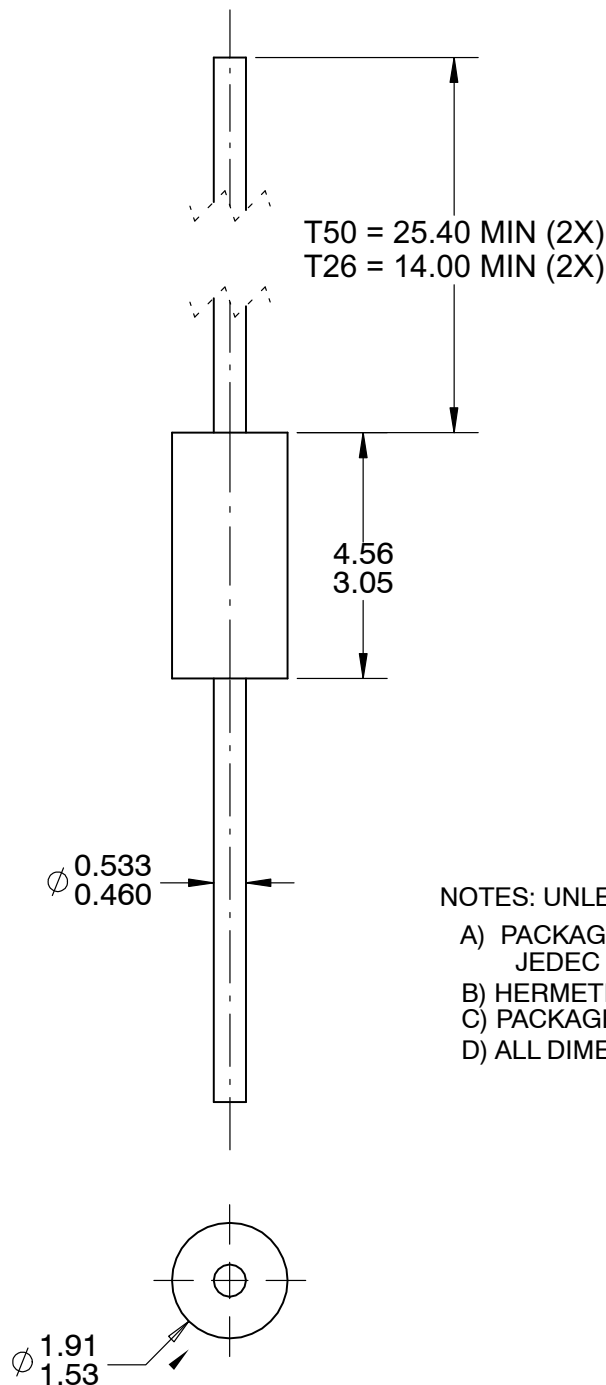
### ORDERING INFORMATION

Device	Package	Shipping†
FDH444	AXIAL LEAD (Pb-Free / Halide Free)	5000 / Bulk Bag
FDH444TR	AXIAL LEAD (Pb-Free / Halide Free)	10000 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, [BRD8011/D](#).

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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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