

High Voltage General Purpose Diode

FDH400, FDLL400

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	
W_{IV}	Working Inverse Voltage	150	V	
I_O	Average Rectified Forward Current	200	mA	
I_F	DC Forward Current	500	mA	
i_F	Recurrent Peak Forward Current	600	mA	
I_{FSM}	Non-Repetitive Peak Forward Current	Pulse Width = 1.0 s	1.0	A
		Pulse Width = 1.0 μs	4.0	
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°C .
- These are steady-state limits. **onsemi** should be consulted on applications involving pulsed or low-duty-cycle operations.

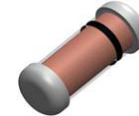
THERMAL CHARACTERISTICS

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

Symbol	Parameter	Max	
		FDH / FDLL400	Unit
P_D	Power Dissipation	500	mW
	Derate above 25°C	3.33	mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

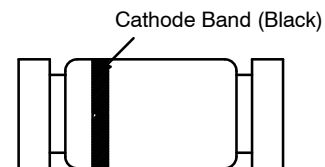


AXIAL LEAD
(DO-35)
CASE 017AG



MiniMELF/SOD-80
CASE 100AD

MARKING DIAGRAM



(1st band denotes cathode terminal and has wider width)

ORDERING INFORMATION

Device	Package	Shipping [†]
FDLL400	MiniMELF/SOD-80 (Pb-Free/Halide Free)	2500 / Tape & Reel
FDH400	AXIAL LEAD (Pb-Free / Halide Free)	5000 / Bulk
FDH400TR	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](#).

FDH400, FDLL400

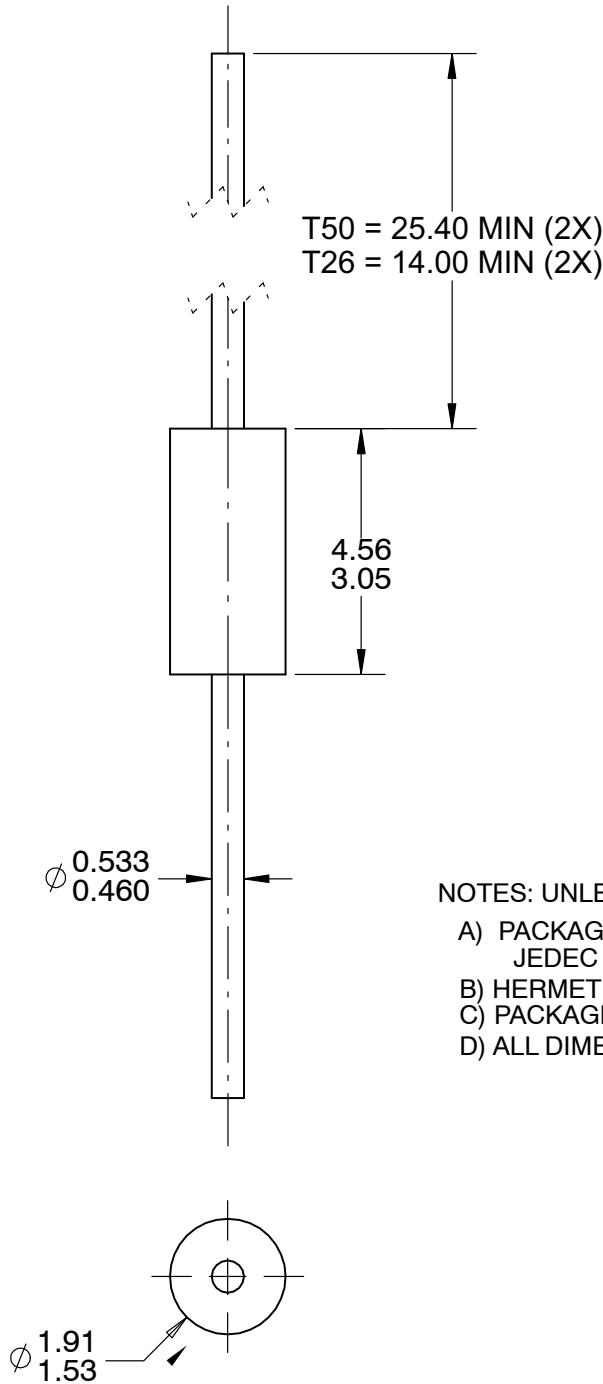
ELECTRICAL CHARACTERISTICS (Values are at $T_A = 25^\circ\text{C}$ unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
V_R	Breakdown Voltage	$I_R = 100 \mu\text{A}$	200	-	V
I_R	Reverse Leakage	$V_R = 150 \text{ V}$	-	100	nA
		$V_R = 150 \text{ V}, T_A = 150^\circ\text{C}$	-	100	μA
V_F	Forward Voltage	$I_F = 200 \text{ mA}$	-	1.0	V
		$I_F = 300 \text{ mA}$	-	1.1	
C_O	Diode Capacitance	$V_R = 0, f = 1.0 \text{ MHz}$	-	2.0	pF
t_{rr}	Reverse Recovery Time	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3.0 \text{ mA}, R_L = 100 \Omega$	-	50	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
ISSUE 0

DATE 31 AUG 2016



- 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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DESCRIPTION:	AXIAL LEAD	PAGE 1 OF 1

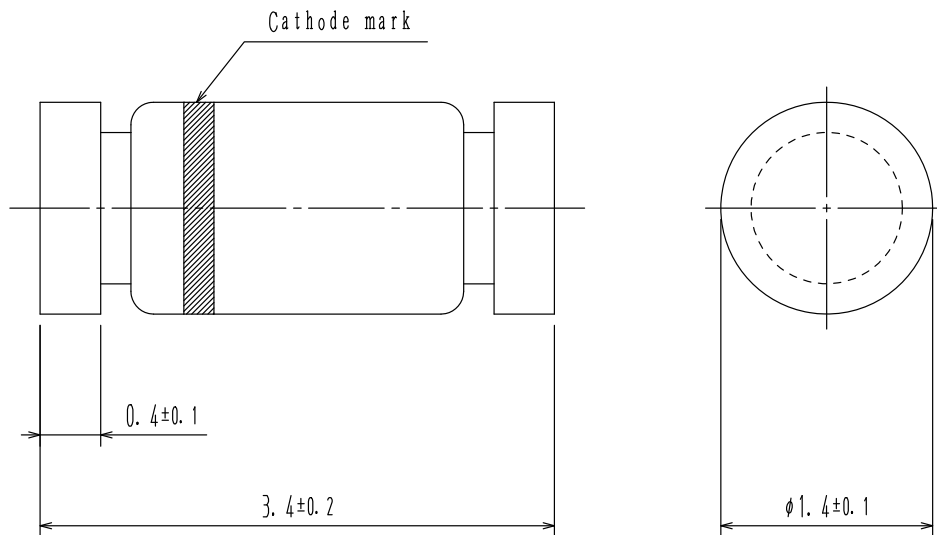
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MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS




MiniMELF / SOD-80
CASE 100AD
ISSUE O

DATE 30 APR 2012



NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE STANDARD REFERENCE:
JEDEC DO-213, VARIATION AC.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.
- C)  CORNER RADIUS IS OPTIONAL.
- D) DRAWING FILE NAME: SOD80A REV01

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