

# Small Signal Diode 1N5282

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

Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	80	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 s Pulse Width = 1.0 μs	1.0 4.0	A A
T <sub>STG</sub>	T <sub>STG</sub> 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.
- 2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

## THERMAL CHARACTERISTICS

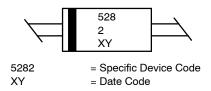
Symbol	Parameter	Value	Unit
$P_{D}$	Power Dissipation	500	mV
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W



## AXIAL LEAD (DO-35) CASE 017AG

(Color Band Denotes Cathode)

#### MARKING DIAGRAM



## **ORDERING INFORMATION**

Device	Package	Shipping <sup>†</sup>
1N5282	AXIAL LEAD	5000 Units / Bulk
1N5282TR	(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.

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

Symbol	Parameter	Test Conditions	Min	Тур	Max	Unit
V <sub>R</sub>	Breakdown Voltage	Ι <sub>R</sub> = 5 μΑ	80	-	-	V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 0.1 mA I <sub>F</sub> = 1.0 mA I <sub>F</sub> = 10 mA I <sub>F</sub> = 100 mA I <sub>F</sub> = 300 mA I <sub>F</sub> = 500 mA	0.45 0.55 0.67 0.80 0.92 1.05	- - - - -	0.49 0.60 0.725 0.90 1.1 1.3	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 55 V V <sub>R</sub> = 55 V, T <sub>A</sub> = 150°C	-	-	100 100	nA μA
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 0, f = 1.0 MHz	-	-	2.5	pF
t <sub>rr1</sub>	Reverse Recovery Time	$I_F$ = $I_R$ = 10 mA, $R_L$ = 100 $\Omega$ Irr = 1.0 mA	_	-	4	ns
t <sub>rr2</sub>	Reverse Recovery Time	$I_F$ = $I_R$ = 200 mA, $R_L$ = 100 $\Omega$ Irr = 20 mA	-	-	4	ns

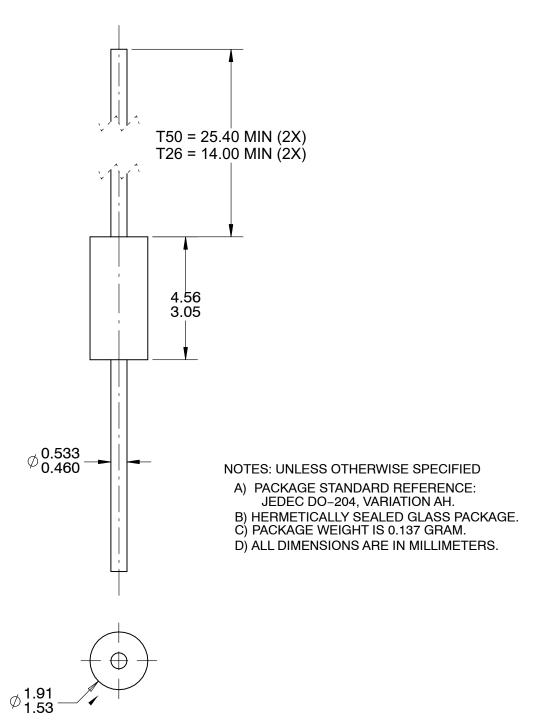
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

1



AXIAL LEAD CASE 017AG ISSUE O

**DATE 31 AUG 2016** 



DOCUMENT NUMBER:	98AON13443G Electronic versions are uncontrolled except when accessed directly from the Document Reposito Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.		
DESCRIPTION:	AXIAL LEAD		PAGE 1 OF 1

ON Semiconductor and are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. ON Semiconductor does not convey any license under its patent rights nor the rights of others.

onsemi, Onsemi, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "onsemi" or its affiliates and/or subsidiaries in the United States and/or other countries. onsemi owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of onsemi's product/patent coverage may be accessed at <a href="www.onsemi.com/site/pdf/Patent-Marking.pdf">www.onsemi.com/site/pdf/Patent-Marking.pdf</a>. Onsemi reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and onsemi makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using onsemi products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by onsemi. "Typical" parameters which may be provided in onsemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. onsemi does not convey any license under any of its intellectual property rights nor the rights of others. onsemi products are not designed, intended, or authorized for use as a critical component in life support systems or any FDA class 3 medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase

#### ADDITIONAL INFORMATION

**TECHNICAL PUBLICATIONS:** 

 $\textbf{Technical Library:} \ \underline{www.onsemi.com/design/resources/technical-documentation}$ 

onsemi Website: www.onsemi.com

ONLINE SUPPORT: www.onsemi.com/support

For additional information, please contact your local Sales Representative at

www.onsemi.com/support/sales