

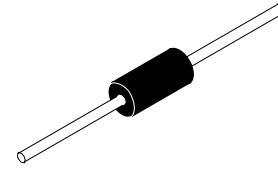


**THE DATASHEET OF  
1N5282TR**



# Small Signal Diode

## 1N5282



**AXIAL LEAD (DO-35)  
CASE 017AG**  
(Color Band Denotes Cathode)

**ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Maximum Repetitive Reverse Voltage	80	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 s Pulse Width = 1.0 $\mu\text{s}$	1.0	A
		4.0	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**

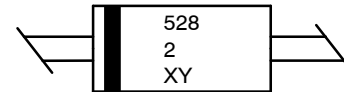
Symbol	Parameter	Value	Unit
$P_D$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_R$	Breakdown Voltage	$I_R = 5 \mu\text{A}$	80	-	-	V
$V_F$	Forward Voltage	$I_F = 0.1 \text{ mA}$	0.45	-	0.49	V
		$I_F = 1.0 \text{ mA}$	0.55	-	0.60	
		$I_F = 10 \text{ mA}$	0.67	-	0.725	
		$I_F = 100 \text{ mA}$	0.80	-	0.90	
		$I_F = 300 \text{ mA}$	0.92	-	1.1	
		$I_F = 500 \text{ mA}$	1.05	-	1.3	
$I_R$	Reverse Current	$V_R = 55 \text{ V}$ $V_R = 55 \text{ V}, T_A = 150^\circ\text{C}$	-	-	100 100	nA $\mu\text{A}$
$C_T$	Total Capacitance	$V_R = 0, f = 1.0 \text{ MHz}$	-	-	2.5	pF
$t_{rr1}$	Reverse Recovery Time	$I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega$ $I_{rr} = 1.0 \text{ mA}$	-	-	4	ns
$t_{rr2}$	Reverse Recovery Time	$I_F = I_R = 200 \text{ mA}, R_L = 100 \Omega$ $I_{rr} = 20 \text{ mA}$	-	-	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.

**MARKING DIAGRAM**



5282 = Specific Device Code  
XY = Date Code

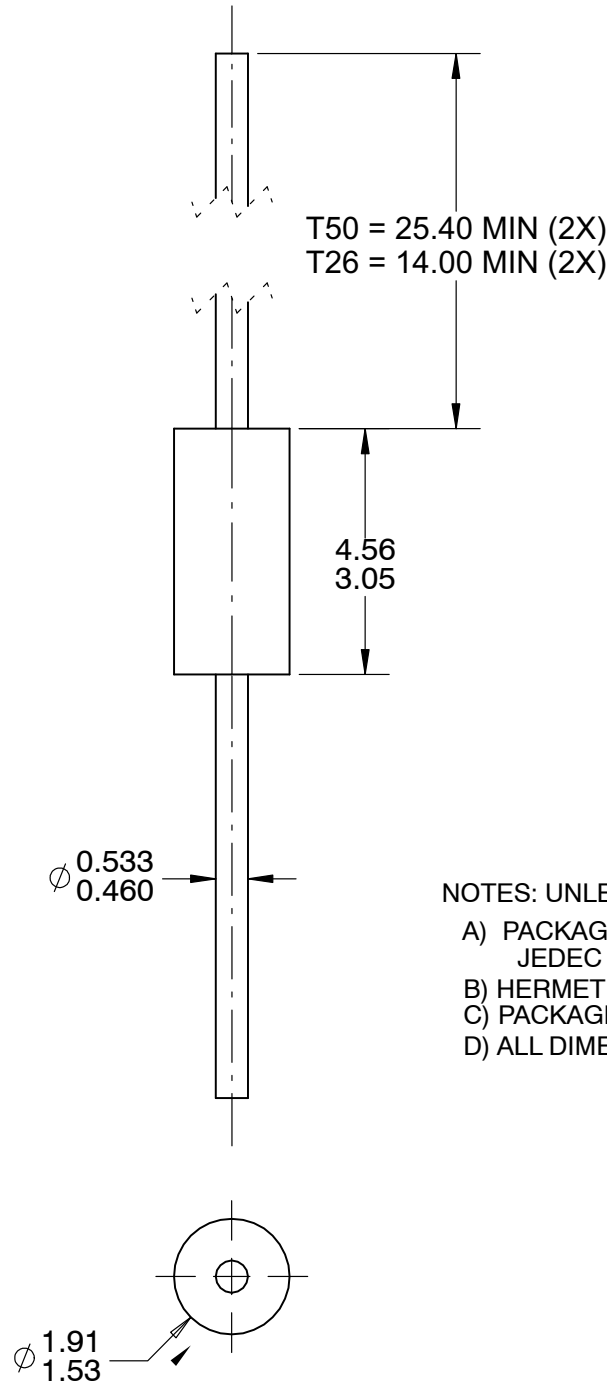
**ORDERING INFORMATION**

Device	Package	Shipping†
1N5282	AXIAL LEAD (Pb-Free, Halide Free)	5000 Units / Bulk
1N5282TR		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](#).

AXIAL LEAD  
CASE 017AG  
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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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<b>DESCRIPTION:</b>	<b>AXIAL LEAD</b>	<b>PAGE 1 OF 1</b>

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