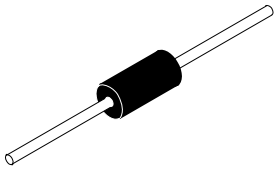
Small Signal Diode

1N5282



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

ABSOLUTE MAXIMUM RATINGS (T_A = 25°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 μs	 1.0 4.0	 A A
T_{STG}	Storage Temperature Range	−65 to +200	°C
T_J	Operating Junction Temperature	175	°C

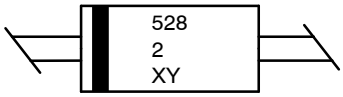
Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

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

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.

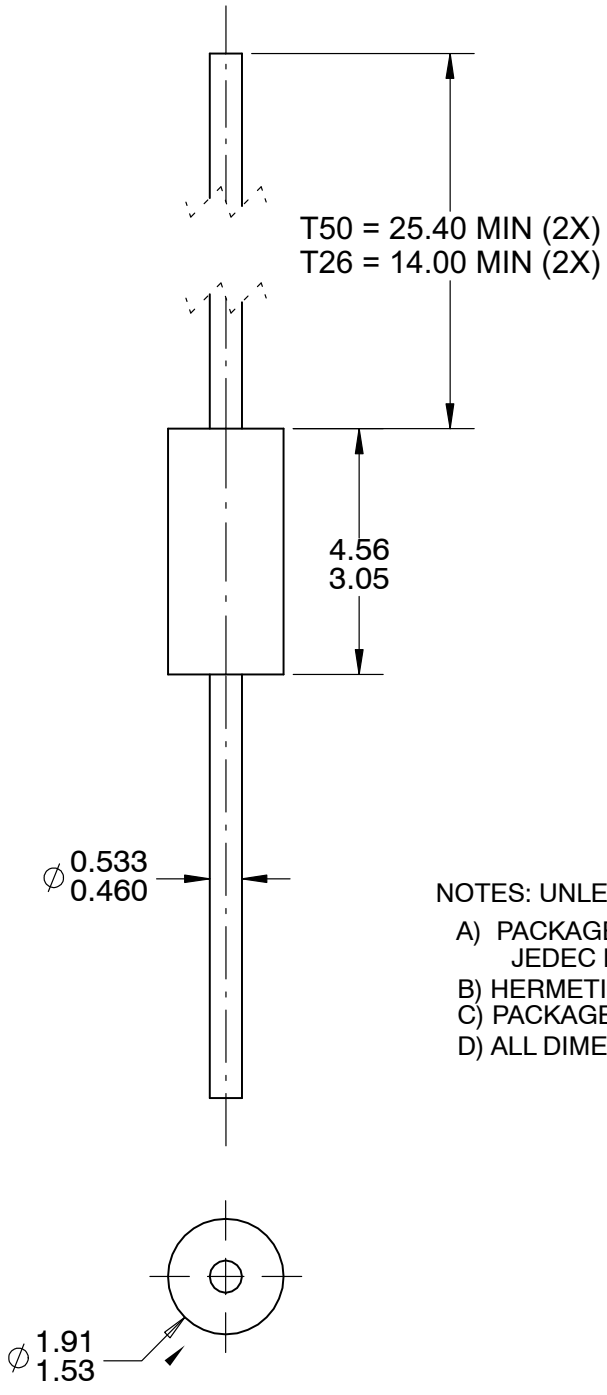
ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_R	Breakdown Voltage	I_R = 5 μA	80	–	–	V
V_F	Forward Voltage	I_F = 0.1 mA I_F = 1.0 mA I_F = 10 mA I_F = 100 mA I_F = 300 mA I_F = 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_R	Reverse Current	V_R = 55 V V_R = 55 V, T_A = 150°C	–	–	100 100	nA μA
C_T	Total Capacitance	V_R = 0, f = 1.0 MHz	–	–	2.5	pF
t_{rr1}	Reverse Recovery Time	I_F = I_R = 10 mA, R_L = 100 Ω Irr = 1.0 mA	–	–	4	ns
t_{rr2}	Reverse Recovery Time	I_F = I_R = 200 mA, R_L = 100 Ω 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.

AXIAL LEAD
CASE 017AG
ISSUE O

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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