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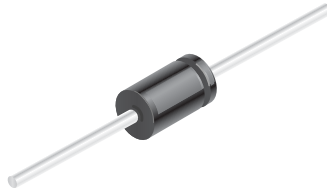
1N5282

Small Signal Diode

November 2009



1N5282 — Small Signal Diode



DO-35

Color Band Denotes Cathode

Absolute Maximum Ratings* $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
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 second Pulse Width = 1.0 microsecond	1.0	A
		4.0	A
T_{STG}	Storage Temperature Range	-65 to +200	$^{\circ}\text{C}$
T_J	Operating Junction Temperature	175	$^{\circ}\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

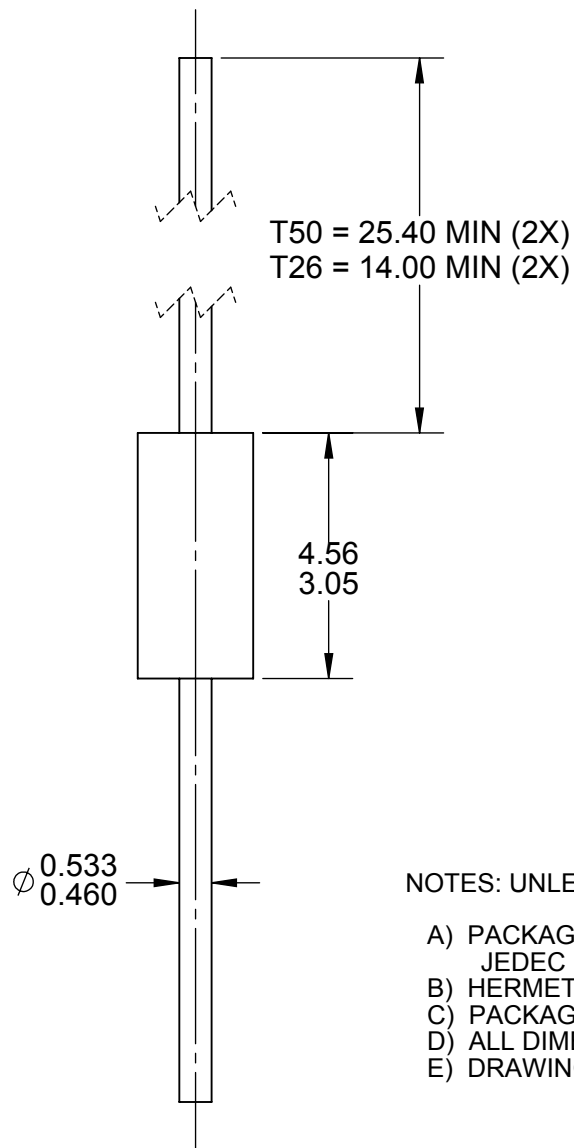
- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

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

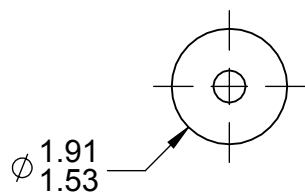
Electrical Characteristics $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
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	V
		$I_F = 10\ \text{mA}$	0.67	0.725	V
		$I_F = 100\ \text{mA}$	0.80	0.90	V
		$I_F = 300\ \text{mA}$	0.92	1.1	V
		$I_F = 500\ \text{mA}$	1.05	1.3	V
I_R	Reverse Current	$V_R = 55\ \text{V}$		100	nA
		$V_R = 55\ \text{V}, T_A = 150^{\circ}\text{C}$		100	μA
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



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.
- E) DRAWING FILE NAME: DO35AREV03



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