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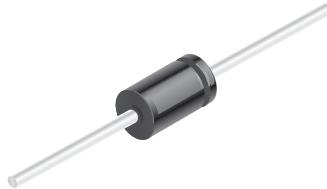


1N5282 Small Signal Diode

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	1.0	A
	Pulse Width = 1.0 second	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:

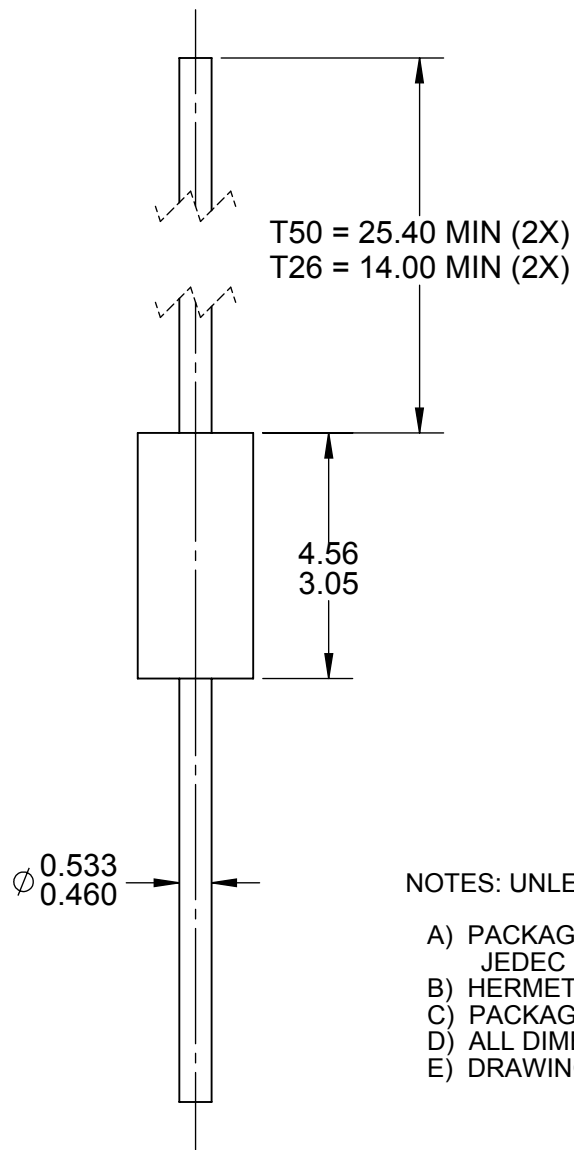
- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

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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