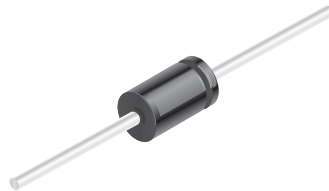


1N5282

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

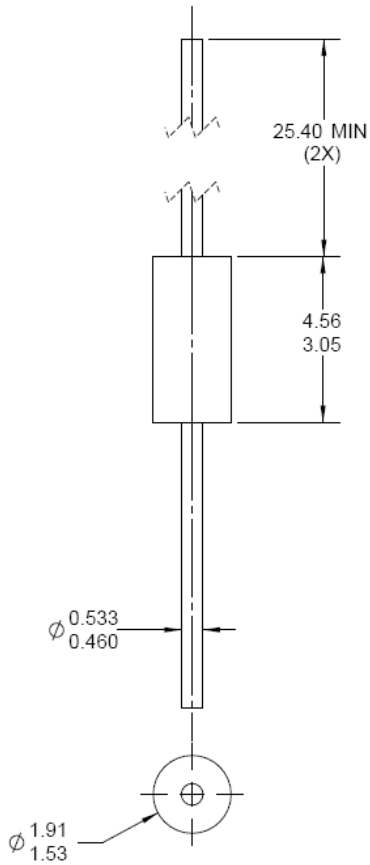
Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^{\circ}\text{C}/\text{W}$

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

Physical Dimensions

DO-35



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: DO35AREV02

Dimensions in Millimeters



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- | | | | |
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Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
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