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1N5282 — Small Signal Diode

November 2009

1N5282 Small Signal Diode



Absolute Maximum Ratings* $T_A=25^{\circ}C$ 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 4.0	AA	
T _{STG}	Storage Temperature Range	-65 to +200	°C	
Тј	Operating Junction Temperature	175	°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.

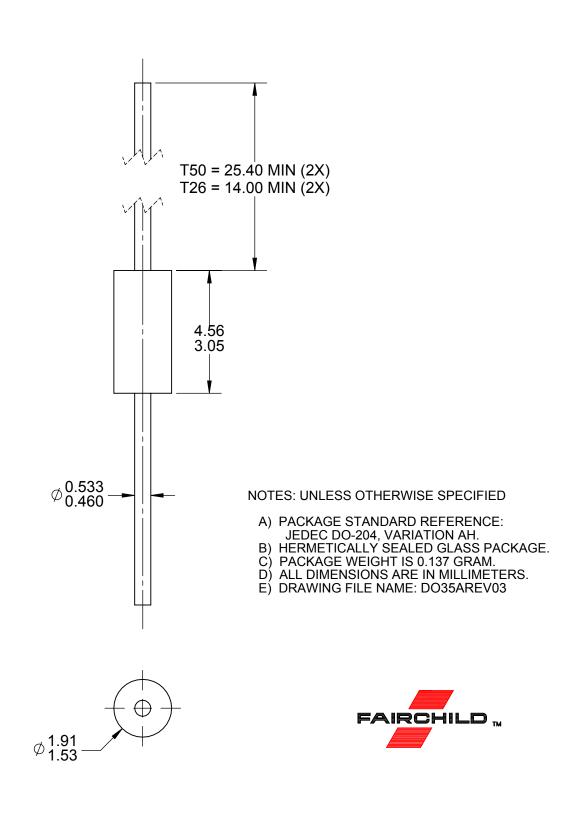
Thermal Characteristics

Symbol	Parameter	Value	Units
PD	Power Dissipation	500	mV
$R_{ hetaJA}$	Thermal Resistance, Junction to Ambient	300	°C/W

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Symbol	Parameter	Test Conditions	Min	Max	Units
V _R	Breakdown Voltage	I _R = 5 μA	80		V
V _F	Forward Voltage	I _F = 0.1 mA I _F = 1.0 mA	0.45 0.55	0.49 0.60	V V
		$I_{\rm F} = 10 {\rm mA}$ $I_{\rm F} = 100 {\rm mA}$	0.67 0.80	0.725 0.90	V V
		$I_F = 300 \text{ mA}$ $I_F = 500 \text{ mA}$	0.92 1.05	1.1 1.3	V V
I _R	Reverse Current	V _R = 55 V V _R = 55 V, T _A = 150 °C		100 100	nA μA
CT	Total Capacitance	V _R = 0, f = 1.0 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



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