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August 2011



1N4447 Small Signal Diode



DO-35 Color Band Denotes Cathode

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

Symbol	Parameter	Value	Units	
V _{RRM}	Maximum Repetitive Reverse Voltage	100	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	A A	
T _{STG}	Storage Temperature Range	-65 to +200	°C	
Т _Ј	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	mW
$R_{ extsf{ heta}JA}$	Thermal Resistance, Junction to Ambient	300	°C/W

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

Symbol	Parameter	Test Conditions	Min.	Max.	Units
V _R	Breakdown Voltage	I _R = 100μA I _R = 5.0μA	100 75		V V
V _F	Forward Voltage	I _F = 20mA		1.0	V
Ι _R	Reverse Leakage	V _R = 20V V _R = 20V, T _A = 150°C		25 50	nA μA
CT	Total Capacitance	V _R = 0, f = 1.0MHz		2.0	pF
t _{rr}	Reverse Recovery Time	$I_{F} = 10\text{mA}, V_{R} = 6.0\text{V}$ $I_{rr} = 1.0\text{mA}, R_{L} = 100\Omega$		4.0	ns



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