

December 2004

1N456A Small Signal Diode



DO-35 Color Band Denotes Cathode

Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit	
V _{RRM}	Maximum Repetitive Reverse Voltage	30	V	
I _{F(AV)}	Average Rectified Forward Current	500	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	
TJ	Operating Junction Temperature	175	°C	

* These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:

1) These ratings are based on a maximum junction temperature of 200 degrees C.

2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Unit
PD	Power Dissipation	500	mW
$R_{ extsf{ heta}JA}$	Thermal Resistance, Junction to Ambient	300	°C/W

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V _R	Breakdown Voltage	$I_R = 5\mu A$	30		V
V _F	Forward Voltage	I _F = 100mA		1.0	V
I _R	Reverse Leakage	V _R = 25V V _R = 25V, T _A = 150°C		25 50	nA μA

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