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December 2004

1N459/A 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	200	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 = 100μA	200		V
V _F	Forward Voltage 1N459A	I _F = 3mA I _F = 100mA		1.0 1.0	V V
I _R	Reverse Leakage 1N45 1N455	V _R = 175V A V _R = 175V, T _A = 150°C		25 5	nA μA
CT	Total Capacitance 1N459	A $V_{R} = 0, f = 1.0MHz$		6.0	pF

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