

ON Semiconductor

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ON Semiconductor®

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
T _J	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
P _D	Power Dissipation	500	mW
R _{θJA}	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 1N459 1N459A	V _R = 175V V _R = 175V, T _A = 150°C		25 5	nA µA
C _T	Total Capacitance 1N459A	V _R = 0, f = 1.0MHz		6.0	pF

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