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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
$R_{\theta JA}$	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	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

October-2017,Rev.1

Publication Order Number:
1N459/A /D