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ON Semiconductor® 1N459/A

Small Signal Diode



DO-35

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

Symbol	Parameter	Value	Unit V	
V _{RRM}	Maximum Repetitive Reverse Voltage	200		
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.

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

 $[\]begin{tabular}{ll} \textbf{NOTES:}\\ \textbf{1)} \ These \ ratings \ are \ based \ on \ a \ maximum \ junction \ temperature \ of \ 200 \ degrees \ C. \end{tabular}$

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

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