

August 2011

MMSD459A Small Signal Diode



SOD123
Color Band Denotes Cathode
Top Marking: 22

Absolute Maximum Ratings* $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current	200	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current		
	Pulse Width = 1.0 second	1.0	Α
	Pulse Width = 1.0 microsecond	4.0	Α
T _{STG}	Storage Temperature Range	-55 to +150	°C
T _J	Operating Junction Temperature	150	°C

^{*} These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	312	°C/W

Electrical Characteristics $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Test Conditions	Min.	Max.	Units
V _R	Breakdown Voltage	I _R = 100μA	200		V
V _F	Forward Voltage	I _F = 100mA		1.0	V
I _R	Reverse Leakage	V _R = 175V		25	nA
		$V_R = 175V, T_A = 150^{\circ}C$		5.0	μΑ
C _T	Total Capacitance	$V_R = 0, f = 1.0MHz$		6.0	pF





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Definition of Towns

Definition of Terms				
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