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MMSD485B Small Signal Diode





SOD123
Color Band Denotes Cathode

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

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

<sup>\*</sup> 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 <sub>D</sub>	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 <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 100μA	200		V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 100mA		1.0	V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 180V		25	nA
		$V_R = 180V, T_A = 150^{\circ}C$		5.0	μΑ
C <sub>T</sub>	Total Capacitance	$V_R = 0, f = 1.0MHz$		6.0	pF





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Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.		
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