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August 2011



### MMSD485B Small Signal Diode



SOD123 Color Band Denotes Cathode Top Marking: 28

### **Absolute Maximum Ratings**\* $T_A = 25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units	
V <sub>RRM</sub>	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	
Τ <sub>J</sub>	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 <sub>D</sub>	Power Dissipation	400	mW
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	312	°C/W

### **Electrical Characteristics** $T_A = 25^{\circ}C$ 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
۱ <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 180V V <sub>R</sub> = 180V, T <sub>A</sub> = 150°C		25 5.0	nA μA
CT	Total Capacitance	V <sub>R</sub> = 0, f = 1.0MHz		6.0	pF



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**Телефон:** 8 (812) 309 58 32 (многоканальный) **Факс:** 8 (812) 320-02-42 **Электронная почта:** <u>org@eplast1.ru</u> **Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.