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 _{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 Pulse Width = 1.0 microsecond | 1.0 4.0 | A A | |
| T _{STG} | Storage Temperature Range | -55 to +150 | °C | |
| Τ _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 _{θJA} | 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 _R | Breakdown Voltage | I _R = 100μA | 200 | | V |
| V _F | Forward Voltage | I _F = 100mA | | 1.0 | V |
| ۱ _R | Reverse Leakage | V _R = 180V V _R = 180V, T _A = 150°C | | 25 5.0 | nA μA |
| CT | Total Capacitance | V _R = 0, f = 1.0MHz | | 6.0 | pF |



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