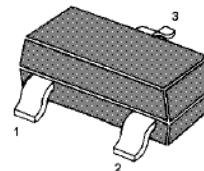
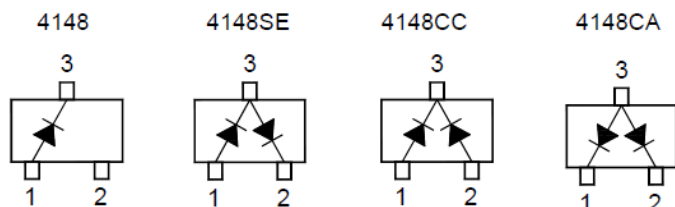


MMBD4148 / SE / CC / CA

Silicon Epitaxial Planar Switching Diode



MMBD4148 Marking Code: 5D
 MMBD4148SE Marking Code: A7
 MMBD4148CC Marking Code: A4
 MMBD4148CA Marking Code: A1
 TO-236 Plastic Package

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings $T_a=25^\circ\text{C}$

| Parameter | Symbol | Value | Unit |
|---|-------------|------------------------|------------------|
| Maximum Repetitive Reverse Voltage | V_{RRM} | 100 | V |
| Reverse Voltage | V_R | 75 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 200 | mA |
| DC Forward Current | I_{FM} | 600 | mA |
| Recurrent Peak Forward Current | I_{FRM} | 700 | mA |
| Non-repetitive Peak Forward Surge Current | I_{FSM} | at $t = 1 \text{ s}$ | 1 |
| | | at $t = 1 \mu\text{s}$ | 2 |
| Total Device Dissipation | P_{tot} | 350 | mW |
| Operating Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

Characteristics at $T_a=25^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit |
|--|-------------|-----------|---------------|--------------------------------------|
| Forward Voltage at $I_F = 10 \text{ mA}$ | V_F | - | 1 | V |
| Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$ at $I_R = 5 \mu\text{A}$ | $V_{(BR)R}$ | 100 75 | - - | V |
| Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 20 \text{ V}, T_a = 150 \text{ }^\circ\text{C}$ | I_R | - | 25 5 50 | nA μA μA |
| Reverse Recovery Time at $I_F = 10 \text{ mA}, V_R = 6 \text{ V}, I_{RR} = 1 \text{ mA}, R_L = 100 \Omega$ | t_{rr} | - | 4 | ns |
| Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ | C_T | - | 4 | pF |

Silicon Epitaxial Planar Switching Diode MMBD4148 / SE / CC / CA

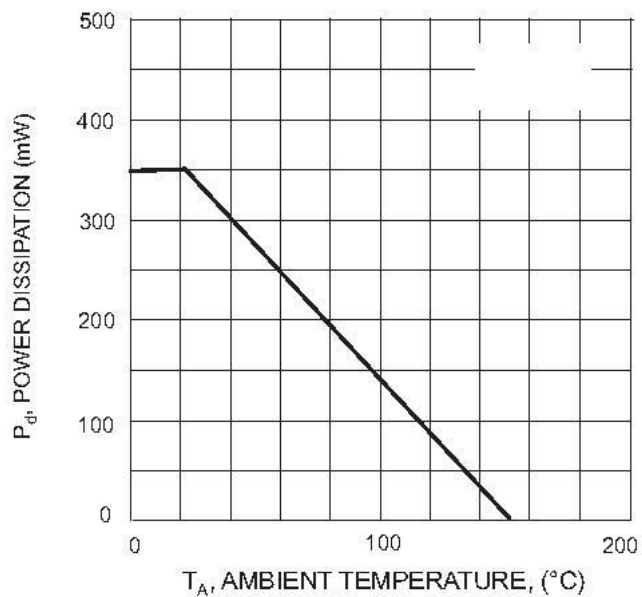


Fig. 1 Power Derating Curve

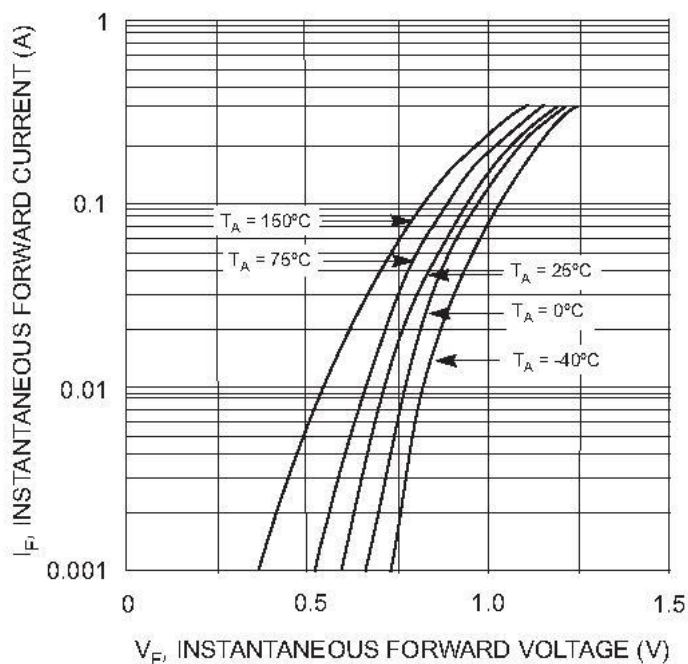


Fig. 2 Forward Characteristics

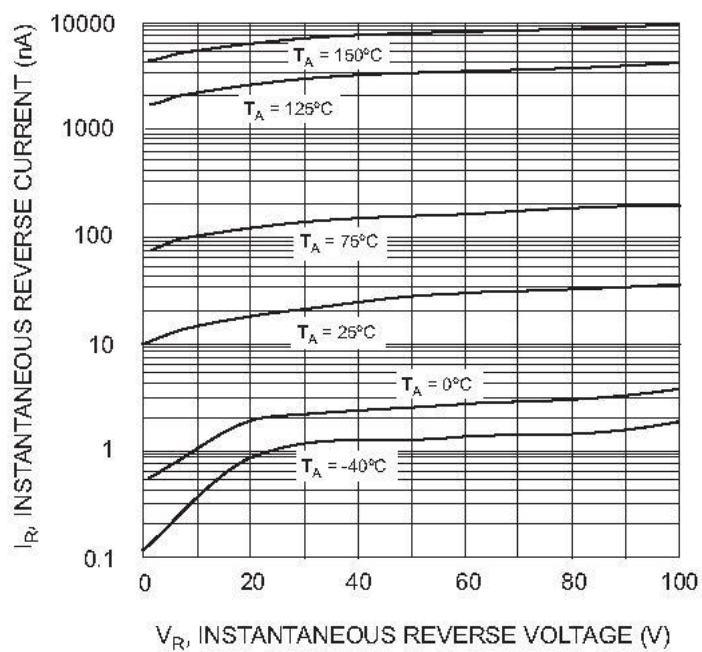


Fig. 3 Typical Reverse Characteristics

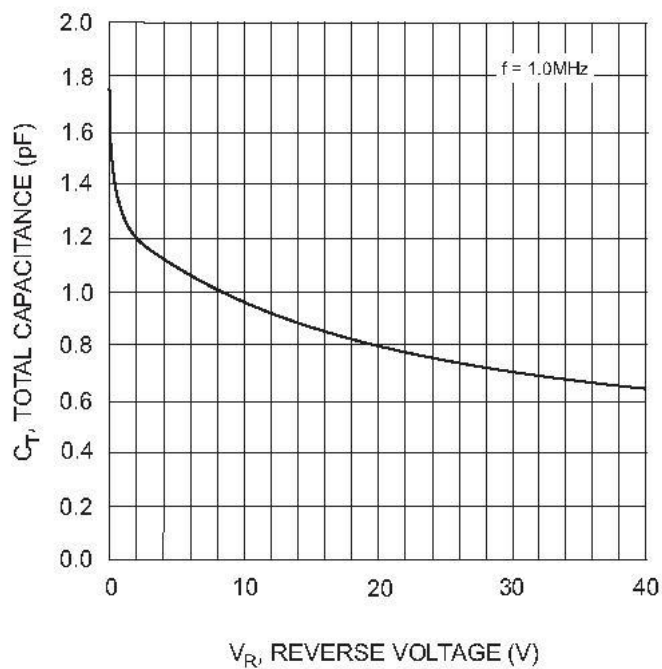


Fig. 4 Typical Capacitance vs. Reverse Voltage

Note: Specification are subject to change without notice. For more detail and update, please visit our website.