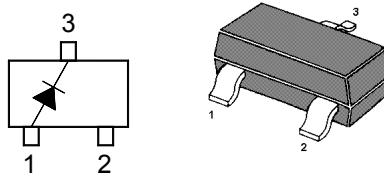


PMMBD914

Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking Code: 5D
SOT-23 Plastic Package

Applications

- Ultra high speed switching application

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

| Parameter | Symbol | Value | Unit |
|---|-----------|---------------|------------------|
| Reverse Voltage | V_R | 100 | V |
| Forward Current | I_F | 200 | mA |
| Non-repetitive Peak Forward Surge Current ($t = 1 \mu\text{s}$) | I_{FSM} | 4 | A |
| Power Dissipation | P_{tot} | 350 | mW |
| 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 $I_R = 100 \mu\text{A}$ | $V_{(BR)R}$ | 100 | - | V |
| Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$ | I_R | - - | 25 5 | nA μA |
| Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$ | t_{rr} | - | 4 | ns |
| Total Capacitance at $V_R = 0$, $f = 1 \text{ MHz}$ | C_T | - | 4 | pF |

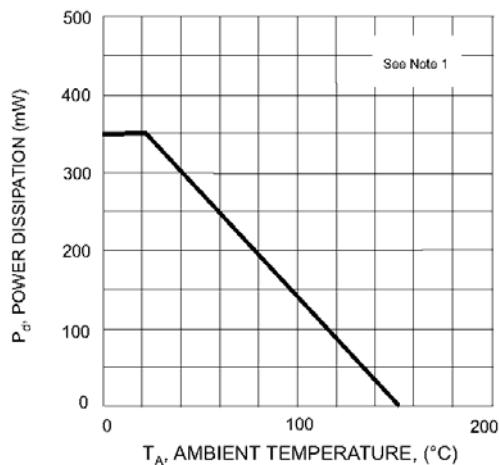


Fig. 1 Power Derating Curve

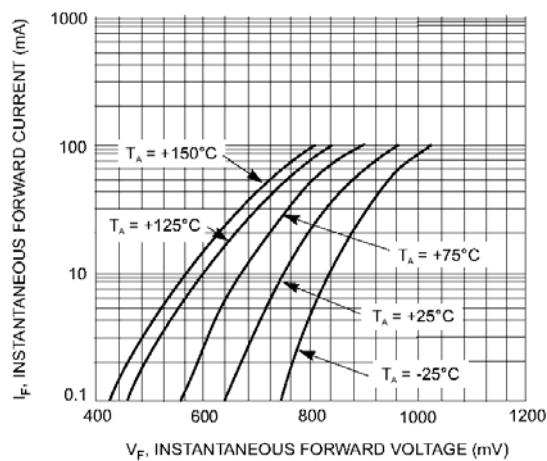


Fig. 2, Typical Forward Characteristics

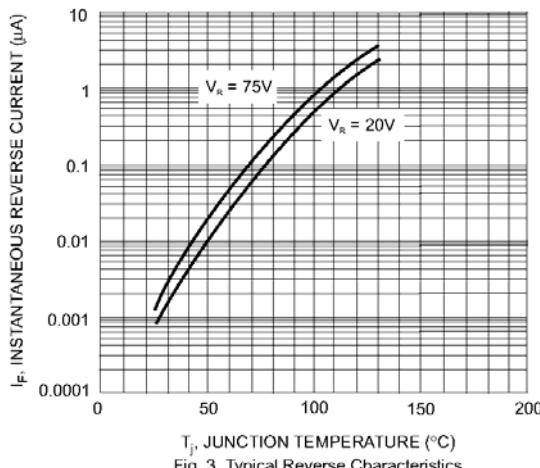


Fig. 3, Typical Reverse Characteristics