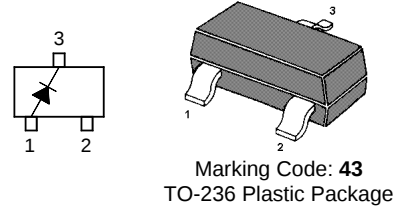


# MMBD301

## Silicon Epitaxial Planar Schottky Barrier Diode

### Features

- Low forward voltage
- Low Reverse current
- Very low capacitance
- Fast switching



### Applications

- High efficiency UHF and VHF detector applications
- Fast switching RF and digital applications

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

| Parameter                            | Symbol      | Value         | Unit             |
|--------------------------------------|-------------|---------------|------------------|
| Reverse Voltage                      | $V_R$       | 30            | V                |
| Average Rectified Forward Current    | $I_{F(AV)}$ | 200           | mA               |
| Power Dissipation                    | $P_{tot}$   | 200           | mW               |
| Operating Junction Temperature Range | $T_j$       | - 55 to + 125 | $^\circ\text{C}$ |
| 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<br>at $I_F = 1\text{ mA}$                        | $V_F$       | -    | 0.45 | V    |
| at $I_F = 10\text{ mA}$                                          | $V_F$       | -    | 0.6  | V    |
| Reverse Breakdown Voltage<br>at $I_R = 10\text{ }\mu\text{A}$    | $V_{(BR)R}$ | 30   | -    | V    |
| Reverse Current<br>at $V_R = 25\text{ V}$                        | $I_R$       | -    | 200  | nA   |
| Total Capacitance<br>at $V_R = 15\text{ V}$ , $f = 1\text{ MHz}$ | $C_T$       | -    | 1.5  | pF   |

