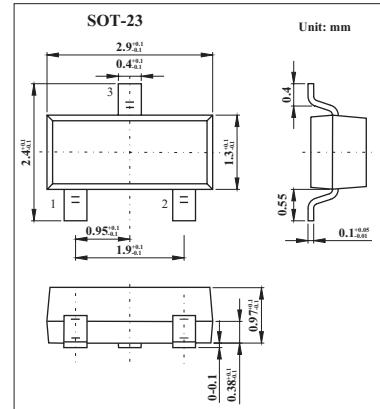


Surface Mount Switching Diodes

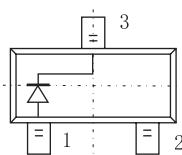
MMBD4448

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



■ PIN Array



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|---------------------------------|-------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Reverse Voltage | V _{RRM} | | |
| Working Peak Reverse Voltage | V _{RWM} | 75 | V |
| DC Blocking Voltage | V _R | | |
| RMS Reverse Voltage | V _{R(RMS)} | 53 | V |
| Forward Continuous Current (*) | I _{FM} | 500 | mA |
| Average Rectified Output Current (*) | I _O | 250 | mA |
| Non-Repetitive Peak Forward Surge Current @ t = 1.0 μ s @ t = 1.0s | I _{FSM} | 4.0 2.0 | A |
| Power Dissipation (*) | P _D | 350 | mW |
| Thermal Resistance Junction to Ambient Air (*) | R _{θ JA} | 357 | °C/W |
| Operating and Storage Temperature Range | T _{j, T_{STG}} | -65 to +150 | °C |

* Valid provided that terminals are kept at ambient temperature.

MMBD4448

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|-------------------------------|----------------|--|------|-------|-----|------|
| Reverse Breakdown Voltage (*) | V(BR)R | IR = 2.5 µ A | 75 | | | V |
| Forward Voltage (*) | VF | IF = 5.0mA | 0.62 | 0.72 | | V |
| | | IF = 10mA | | 0.855 | | |
| | | IF = 100mA | | 1.0 | | |
| | | IF = 150mA | | 1.25 | | |
| Reverse Current (*) | IR | VR = 75V | | 2.5 | | µ A |
| | | VR = 75V, Tj = 150°C | | 50 | | |
| | | VR = 25V, Tj = 150°C | | 30 | | |
| | | VR = 20V | | 25 | | nA |
| Total Capacitance | C _T | VR = 0, f = 1.0MHz | | 4.0 | | pF |
| Reverse Recovery Time | trr | IF = IR = 10mA, Irr = 0.1 x IR, RL = 100 Ω | | 4.0 | | ns |

* Short duration test pulse used to minimize self-heating effect.

■ Marking

| | |
|---------|-----|
| Marking | KA3 |
|---------|-----|