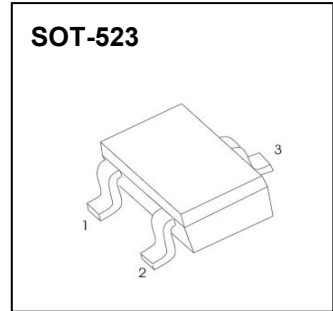


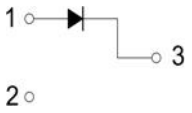
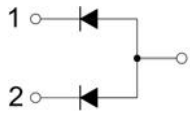
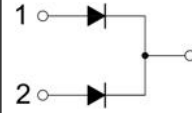
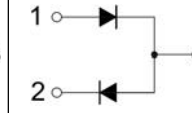
Plastic-Encapsulate Diode

SWITCHING DIODE

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



| MMBD4448HT | MMBD4448HTA | MMBD4448HTC | MMBD4448HTS |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |
| MARKING:A3 | MARKING:A6 | MARKING:A7 | MARKING:AB |

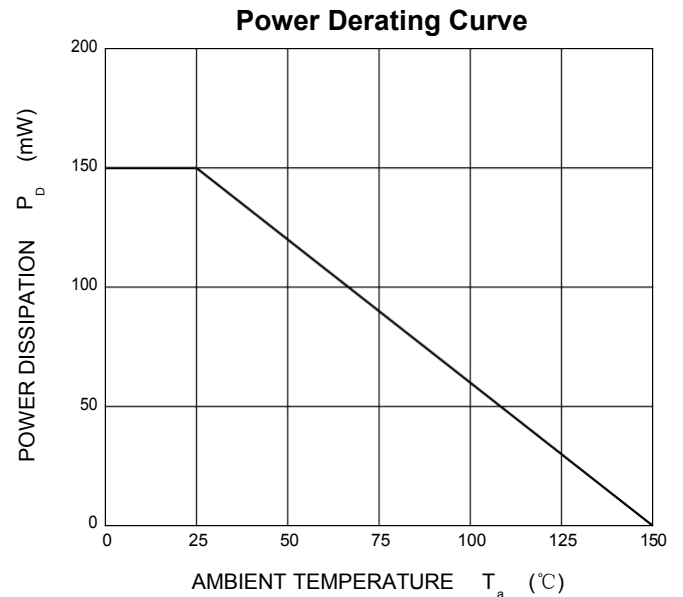
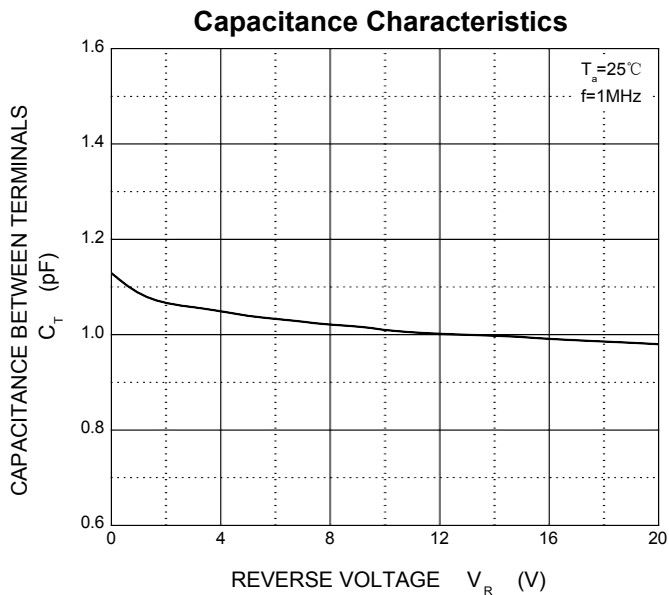
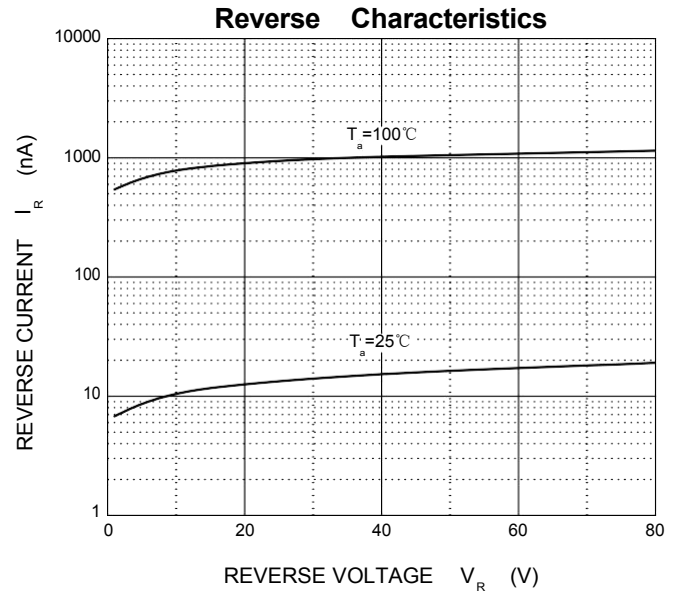
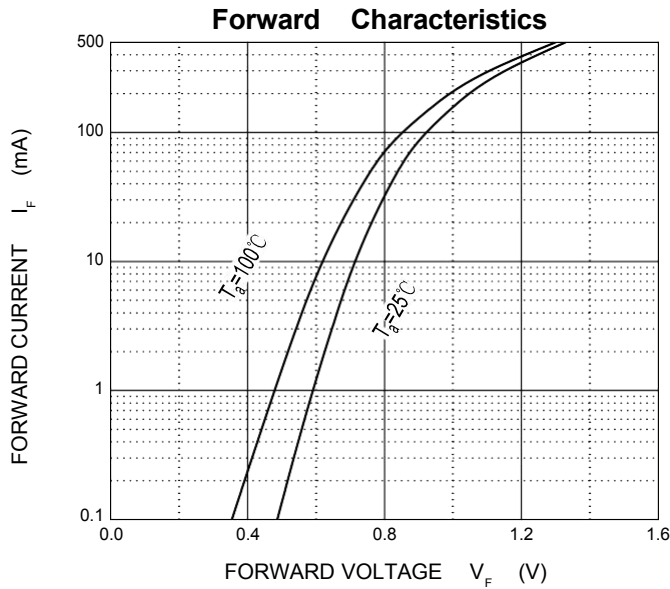
Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25 °C

| Parameter | Symbol | Limit | Unit |
|----------------------------------------------------|---------------------|-----------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V _{RRM} | | |
| Working Peak Reverse Voltage | V _{RWM} | 80 | V |
| DC Blocking Voltage | V _R | | |
| RMS Reverse Voltage | V _{R(RMS)} | 57 | V |
| Forward Continuous Current | I _{FM} | 500 | mA |
| Average Rectified Output Current | I _O | 250 | mA |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 2.0 | A |
| Power Dissipation | P _d | 150 | mW |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 833 | °C/W |
| Storage Temperature | T _{STG} | -55 ~+150 | °C |

Electrical Ratings @T_a=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|-----------------|------|-----|-------|------|---------------------------------------------------------------------------------------------------|
| Reverse breakdown voltage | V _R | 80 | | | V | I _R =2.5 μA |
| Forward voltage | V _{F1} | 0.62 | | 0.72 | V | I _F =5mA |
| | V _{F2} | | | 0.855 | V | I _F =10mA |
| | V _{F3} | | | 1.0 | V | I _F =100mA |
| | V _{F4} | | | 1.25 | V | I _F =150mA |
| Reverse current | I _{R1} | | | 0.1 | μA | V _R =70V |
| | I _{R2} | | | 25 | nA | V _R =20V |
| Capacitance between terminals | C _T | | | 3.5 | pF | V _R =6V, f=1MHz |
| Reverse recovery time | t _{rr} | | | 4 | ns | I _F =I _R =10mA I _{rr} =0.1I _R , R _L =100Ω |

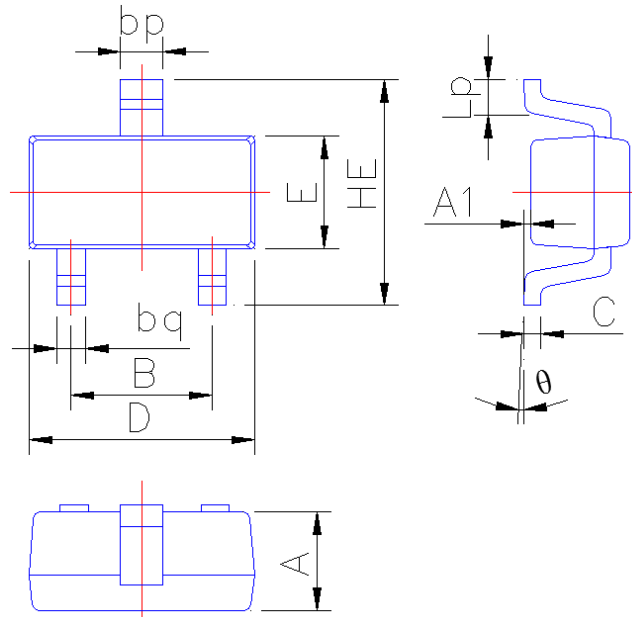
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-523



| Symbol | Dimension in Millimeters | |
|--------|--------------------------|-------|
| | Min | Max |
| A | 0.60 | 0.80 |
| A1 | 0.010 | 0.100 |
| B | 0.95 | 1.05 |
| bp | 0.26 | 0.40 |
| bq | 0.16 | 0.30 |
| C | 0.09 | 0.15 |
| D | 1.50 | 1.70 |
| E | 0.70 | 0.85 |
| HE | 1.45 | 1.75 |
| Lp | 0.16 | 0.36 |
| θ | 0° | 5° |