



## SOT-323 Plastic-Encapsulated Diode

### MMBD4448W SWITCHING DIODE

#### FEATURES

Power dissipation

$P_D$ : 200 mW ( $T_{amb}=25^\circ\text{C}$ )

Collector current

$I_O$ : 250 mA

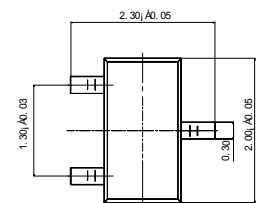
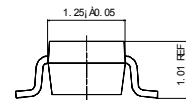
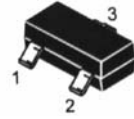
Collector-base voltage

$V_R$ : 75 V

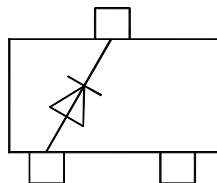
Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$

#### SOT-323



Unit: mm



Marking: KA3

#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

| Parameter                       | Symbol      | Test conditions                                                                   | MIN | MAX                        | UNIT          |
|---------------------------------|-------------|-----------------------------------------------------------------------------------|-----|----------------------------|---------------|
| Reverse breakdown voltage       | $V_{(BR)R}$ | $I_R=10\mu\text{A}$                                                               | 75  |                            | V             |
| Reverse voltage leakage current | $I_R$       | $V_R=20\text{V}$<br>$V_R=75\text{V}$                                              |     | 0.025<br>2.5               | $\mu\text{A}$ |
| Forward voltage                 | $V_F$       | $I_F=5\text{mA}$<br>$I_F=10\text{mA}$<br>$I_F=100\text{mA}$<br>$I_F=150\text{mA}$ |     | 0.72<br>0.855<br>1<br>1.25 | V             |
| Diode capacitance               | $C_D$       | $V_R=0\text{V}, f=1\text{MHz}$                                                    |     | 4                          | pF            |
| Reverse recovery time           | $t_{rr}$    | $I_F=I_R=10\text{mA}$<br>$I_{rr}=0.1\times I_R, R_L=100\Omega$                    |     | 4                          | nS            |

Test period  $<3000\mu\text{s}$ .