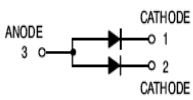
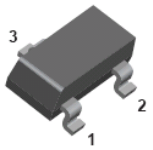
Surface mount switching diode **MMBD2837/MMBD2838**

## FEATURES

- High speed switching: $t_{rr}$=3.0ns(max)
- Low capacitance: $C_T$=1.1pF(typ.)

Lead-free




**SOT-23**

## APPLICATIONS

- Small signal switching

## ORDERING INFORMATION

| Type No. | Marking | Package Code |
|---|---|---|
| MMBD2837 | A5 | SOT-23 |
| MMBD2838 | A61 | SOT-23 |

## MAXIMUM RATING @ Ta=25℃ unless otherwise specified

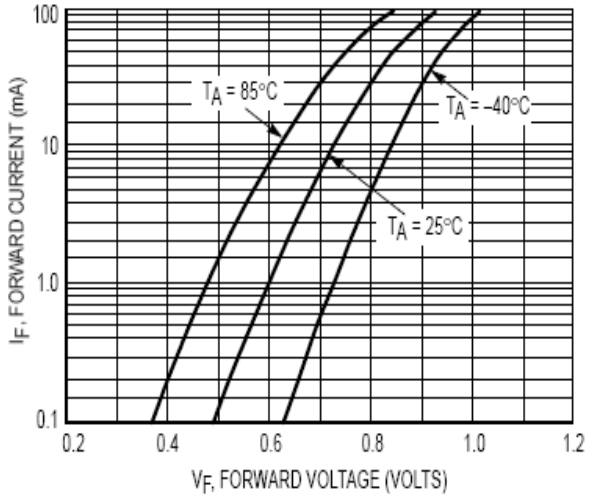
| **Parameter** | **Symbol** | **Limits** | | **Unit** |
|---|---|---|---|---|
| | | MMBD2837 | MMBD2838 | |
| Non-Repetitive Peak reverse voltage | $V_{RM}$ | 35 | 75 | V |
| DC Reverse Voltage | $V_R$ | 30 | 50 | V |
| Average rectified output Current | $I_o$ | 100 | | mA |
| Power Dissipation | $P_d$ | 150 | | mW |
| Junction temperature | $T_J$ | 125 | | ℃ |
| Storage temperature | $T_{STG}$ | -55-125 | | ℃ |

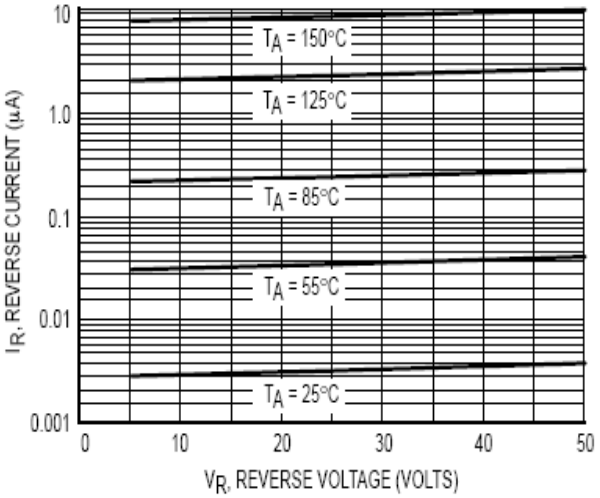
## ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

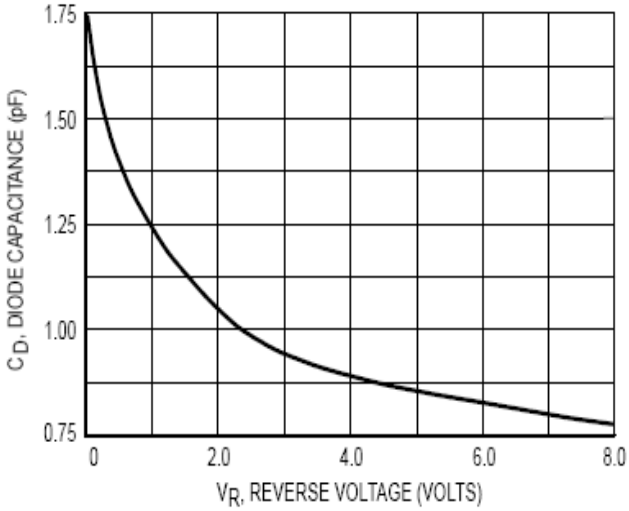
| **Parameter** | **Symbol** | **Min.** | **Typ.** | **Max.** | **Unit** | **Conditions** |
|---|---|---|---|---|---|---|
| Forward voltage | $V_{F1}$ | | 0.67 | 1.0 | V | $I_R$=10mA |
| | $V_{F2}$ | | 0.75 | 1.1 | V | $I_R$=50mA |
| | $V_{F3}$ | | 0.85 | 1.2 | V | $I_F$=100mA |
| Reverse current | $I_R$ | | | 0.1 | μA | $V_R$=30V MMBD2837 |
| | $I_R$ | | | 0.1 | μA | $V_R$=50V MMBD2838 |
| Capacitance between terminals | $C_T$ | | 1.1 | 4 | pF | $V_R$=0,f=1MHz |
| Reverse Recovery Time | $t_{rr}$ | | | 3 | ns | $I_F$=10mA,$V_R$=6V$I_{rr}$=0.1*$I_R$, $R_L$=100Ω |

Surface mount switching diode **MMBD2837/MMBD2838**

## TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



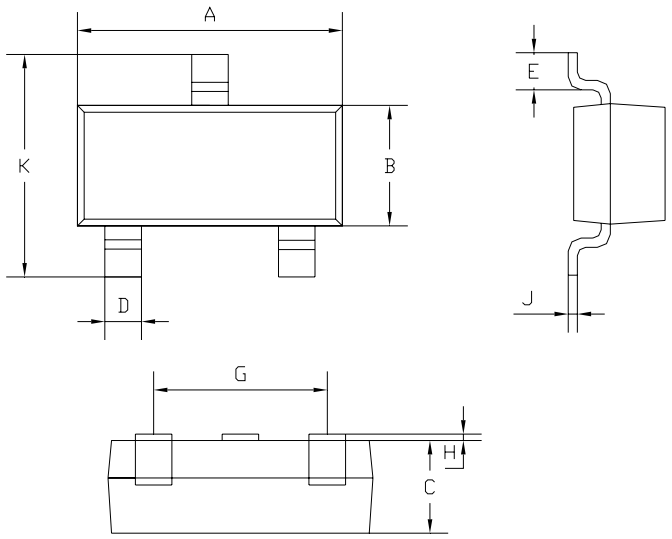



Surface mount switching diode **MMBD2837/MMBD2838**

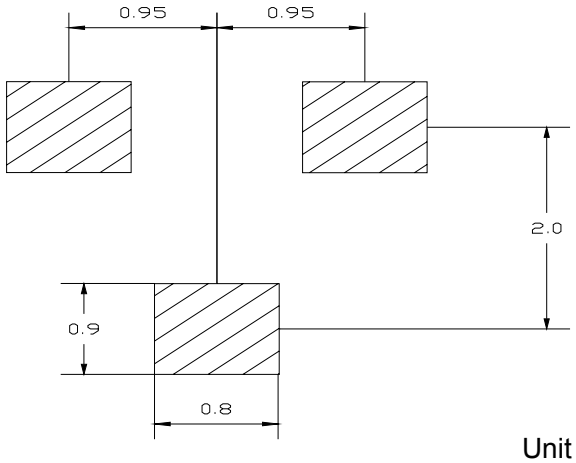
## PACKAGE OUTLINE

Plastic surface mounted package SOT-23




| SOT-23 | | |
|---|---|---|
| Dim | Min | Max |
| A | 2.85 | 2.95 |
| B | 1.25 | 1.35 |
| C | 1.0Typical | |
| D | 0.37 | 0.43 |
| E | 0.35 | 0.48 |
| G | 1.85 | 1.95 |
| H | 0.02 | 0.1 |
| J | 0.1Typical | |
| K | 2.35 | 2.45 |
| All Dimensions in mm | | |

## SOLDERING FOOTPRINT




Unit : mm

## PACKAGE INFORMATION

| Device | Package | Shipping |
|---|---|---|
| MMBD2837/MMBD2838 | SOT-23 | 3000/Tape&Reel |