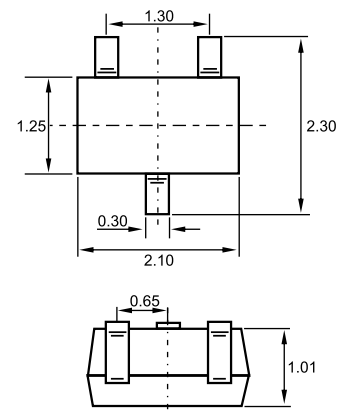


### SOT-323



Dimensions in inches and (millimeters)

## Features

- Extremely fast switching speed.
- Extremely low forward voltage- 0.28V(Typ)@ $I_F=1\text{mA}$ .
- Common anode

## Applications

- High speed switching application ,circuit protection and voltage clamping.

## Ordering Information

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| MMBD717  | B3      | SOT-323      |

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Characteristic                       | Symbol    | Limits      | Unit             |
|--------------------------------------|-----------|-------------|------------------|
| DC Reverse Voltage                   | $V_R$     | 20          | V                |
| Power Dissipation                    | $P_d$     | 200         | mW               |
| Operating Junction Temperature Range | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage Temperature Range            | $T_{STG}$ | -55 to +150 | $^\circ\text{C}$ |

### ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Characteristic            | Symbol      | Min | TYP  | MAX  | UNIT          | Test Condition                   |
|---------------------------|-------------|-----|------|------|---------------|----------------------------------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 20  |      | -    | V             | $I_R=10\mu\text{A}$              |
| Forward Voltage           | $V_F$       | -   | 0.28 | 0.37 | V             | $I_F=1.0\text{mA}$               |
| Reverse Leakage Current   | $I_R$       | -   | 0.05 | 1.0  | $\mu\text{A}$ | $V_R=10\text{V}$                 |
| Diode Capacitance         | $C_D$       | -   | 2.0  | 2.5  | pF            | $V_R=1.0\text{V}, f=1\text{MHz}$ |



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

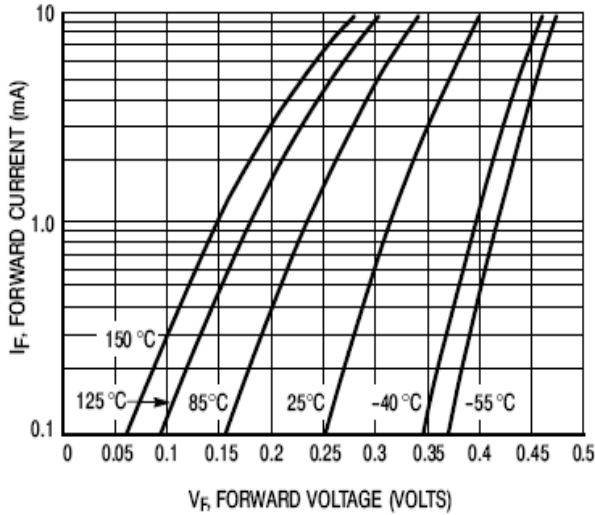


Figure 2. Typical Forward Voltage

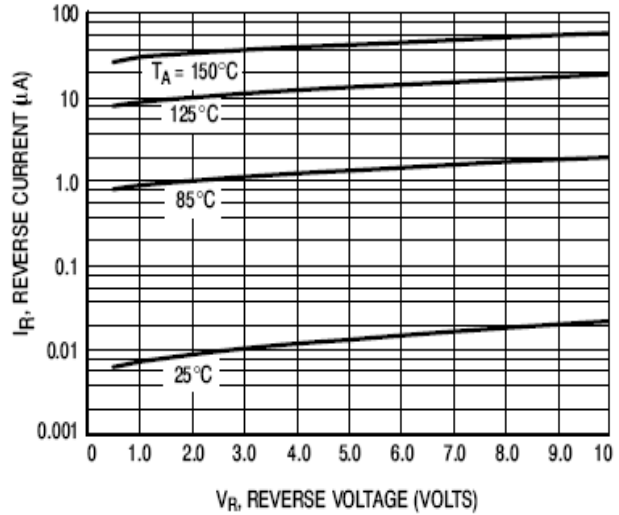


Figure 3. Reverse Current versus Reverse Voltage

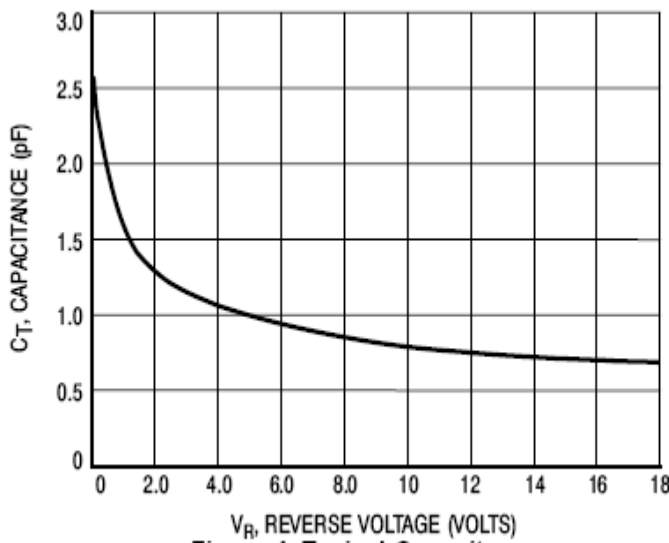


Figure 4. Typical Capacitance

| Package  | Reel    | Reel Size | Box       | Box Size(mm) | Carton     | Carton Size(mm) |
|----------|---------|-----------|-----------|--------------|------------|-----------------|
| SOT -323 | 3000pcs | 7inch     | 45,000pcs | 203×203×195  | 180,000pcs | 438×438×220     |