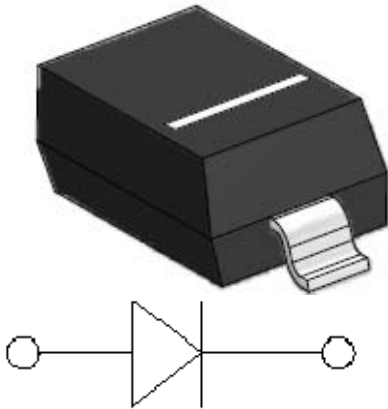


## Small Signal Schottky Diode



### Features

- $V_R$  60V
- $I_{FAV}$  1A

### Mechanical Data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** X6

### ■Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

| PARAMETER                                 | SYMBOL    | UNIT             | Conditions         | VALUE       |
|-------------------------------------------|-----------|------------------|--------------------|-------------|
| Repetitive peak reverse voltage           | $V_{RRM}$ | V                |                    | 60          |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$ | A                | $t_p=8.3\text{ms}$ | 20          |
| Average forward current                   | $I_{FAV}$ | A                |                    | 1           |
| Junction temperature                      | $T_j$     | $^\circ\text{C}$ |                    | 125         |
| Storage temperature range                 | $T_{stg}$ | $^\circ\text{C}$ |                    | -55 to +150 |

### ■Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

| PARAMETER                 | SYMBOL | UNIT          | Conditions           | VALUE |
|---------------------------|--------|---------------|----------------------|-------|
| Maximum Forward voltage   | $V_F$  | V             | $I_F=0.1\text{A}$    | 0.55  |
|                           |        | V             | $I_F=1\text{A}$      | 0.75  |
|                           |        | V             | $I_F=3\text{A}$      | 1     |
| Maximum Reverse current   | $I_R$  | $\mu\text{A}$ | $V_R=60\text{V}$     | 500   |
| Minimum Breakdown voltage | $V_R$  | V             | $I_R=100\mu\text{A}$ | 60    |

### ■Ordering Information (Example)

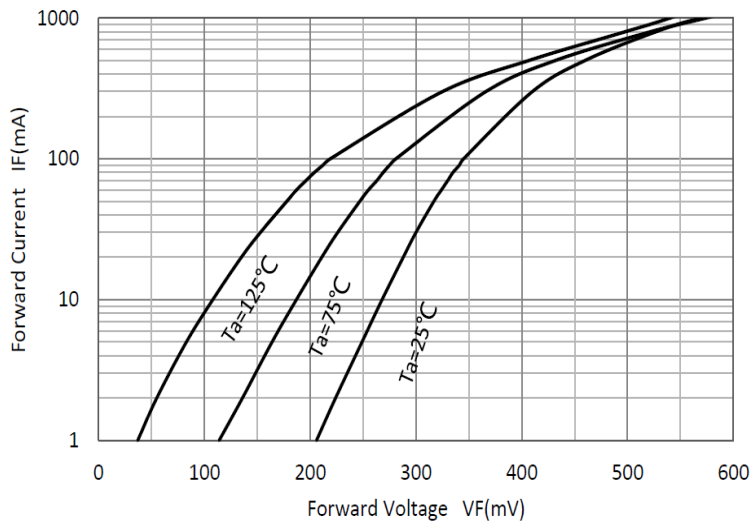
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g)    | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| MBR160       | F2           | Approximate 0.011 | 3000                 | 30000                   | 120000                     | 7" reel       |



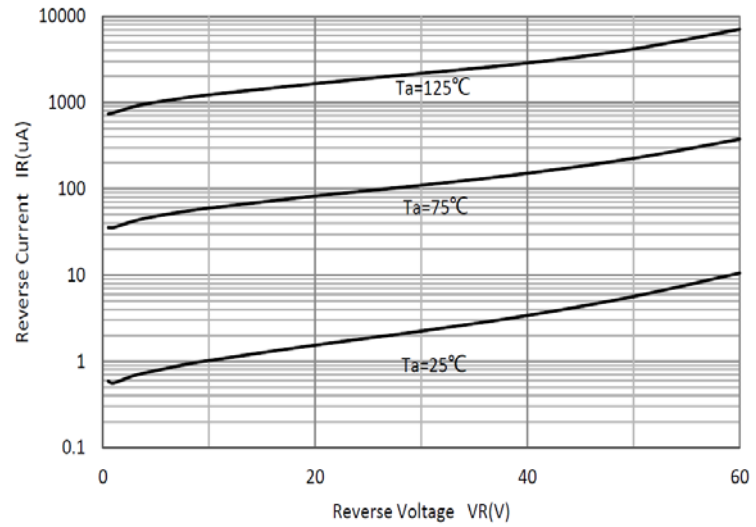
# MBR160

## ■ Characteristics (Typical)

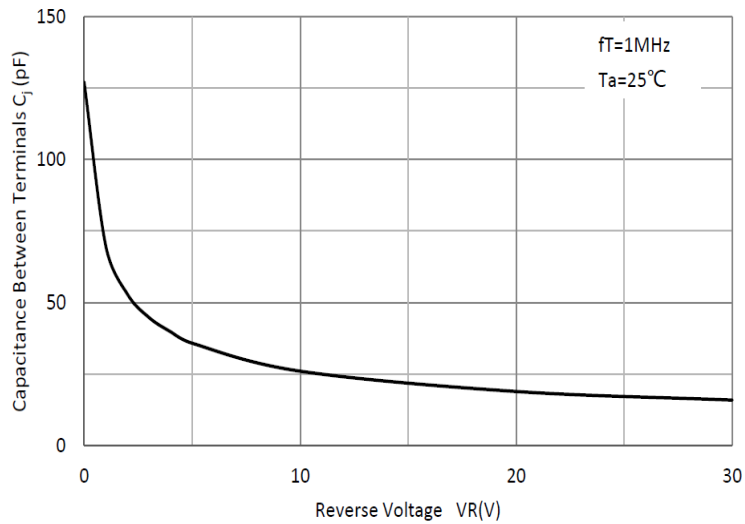
Forward Characteristics



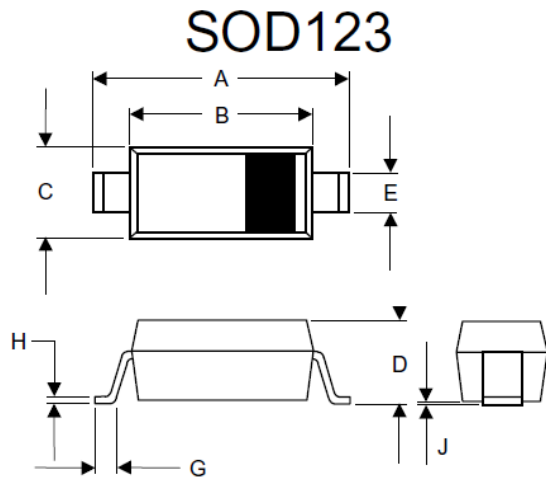
Reverse Characteristics



Capacitance Characteristics

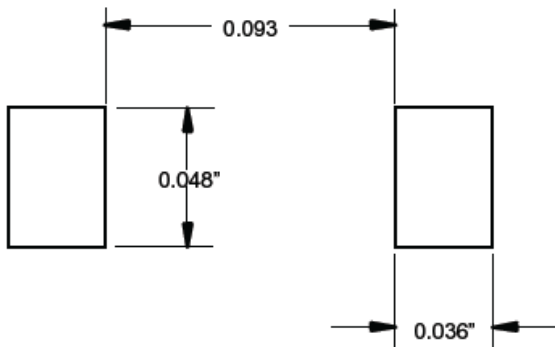


## ■ SOD-123 Package Outline Dimensions



| DIMENSIONS |        |       |       |       |      |
|------------|--------|-------|-------|-------|------|
| DIM        | INCHES |       | MM    |       | NOTE |
|            | MIN    | MAX   | MIN   | MAX   |      |
| A          | .140   | .152  | 3.55  | 3.85  |      |
| B          | .100   | .112  | 2.55  | 2.85  |      |
| C          | .055   | .071  | 1.40  | 1.80  |      |
| D          | -----  | .053  | ----- | 1.35  |      |
| E          | .012   | .031  | 0.30  | .78   |      |
| G          | .006   | ----- | 0.15  | ----- |      |
| H          | -----  | .01   | ----- | .25   |      |
| J          | -----  | .006  | ----- | .15   |      |

## ■ SOD-123 Soldering Footprint



Unit: inches



## Disclaimer

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