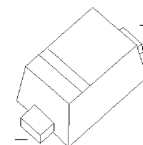


### SCHOTTKY BARRIER DIODE

#### FEATURES

- Small package
- Low forward voltage
- Low reverse current



MARKING: S3

SOD-523

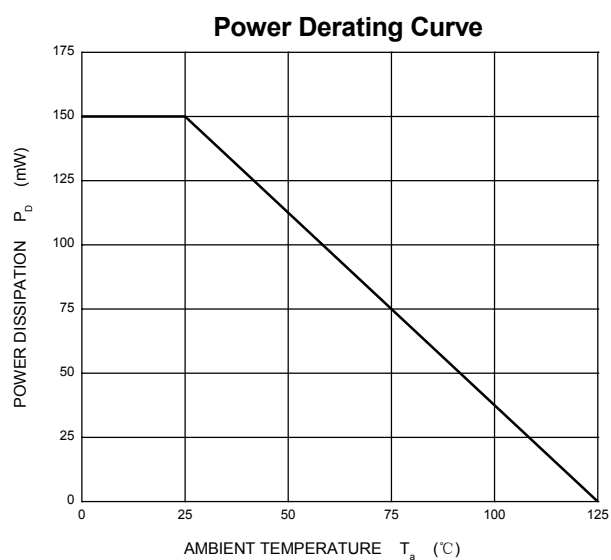
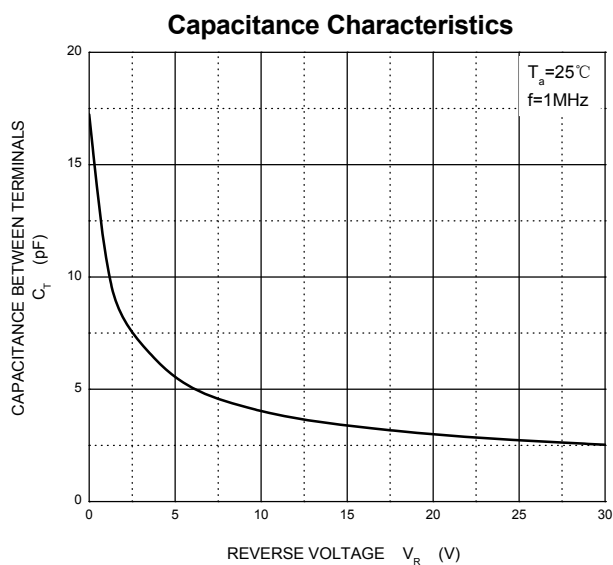
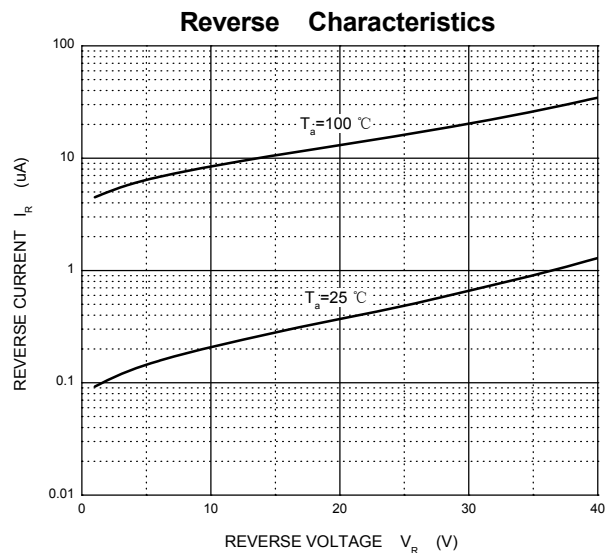
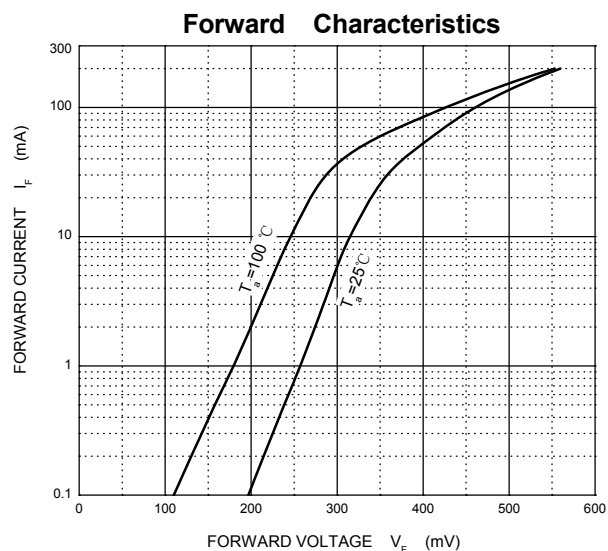
#### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter                                         | Symbol    | Limit      | Unit |
|---------------------------------------------------|-----------|------------|------|
| Peak reverse voltage                              | $V_{RM}$  | 45         | V    |
| DC reverse voltage                                | $V_R$     | 40         | V    |
| Maximum (peak) forward current                    | $I_{FM}$  | 300        | mA   |
| Average forward current                           | $I_O$     | 100        | mA   |
| Non-repetitive Peak Forward Surge Current@t=8.3ms | $I_{FSM}$ | 1000       | mA   |
| Power dissipation                                 | $P_D$     | 150        | mW   |
| Operating Junction Temperature Range              | $T_j$     | -40 ~ +125 | °C   |
| Storage Temperature Range                         | $T_{stg}$ | -55 ~ +150 | °C   |

#### Electrical Ratings @Ta=25°C

| Parameter         | Symbol   | Min | Typ  | Max  | Unit    | Conditions      |
|-------------------|----------|-----|------|------|---------|-----------------|
| Forward voltage   | $V_{F1}$ |     | 0.28 |      | V       | $I_F=1mA$       |
|                   | $V_{F2}$ |     | 0.36 |      | V       | $I_F=10mA$      |
|                   | $V_{F3}$ |     | 0.54 | 0.60 | V       | $I_F=50mA$      |
| Reverse current   | $I_R$    |     |      | 5    | $\mu A$ | $V_R=10V$       |
| Total capacitance | $C_T$    |     | 18   | 25   | pF      | $V_R=0, f=1MHz$ |

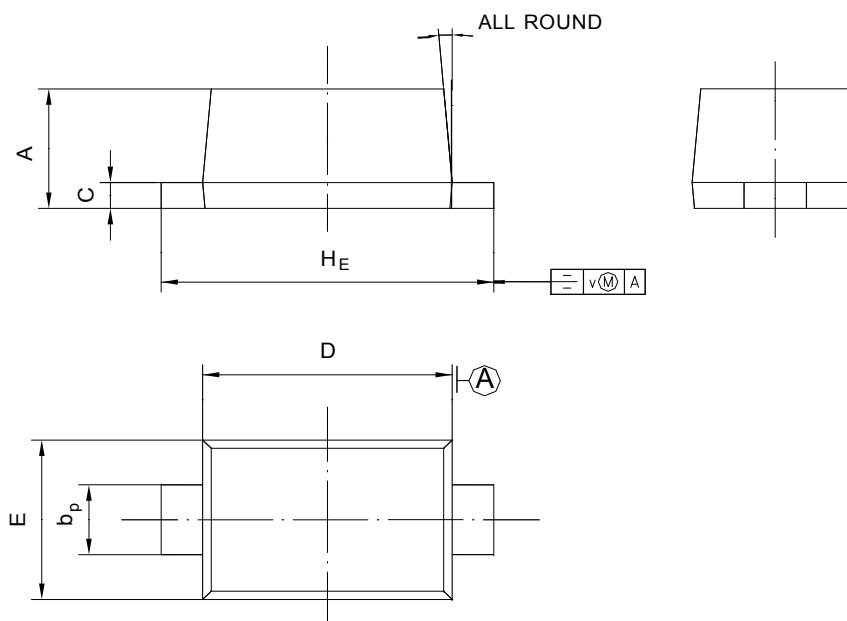
### Typical Characteristics



### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

#### SOD-523



| UNIT | A            | b <sub>p</sub> | C              | D            | E            | H <sub>E</sub> | V   | ∠  |
|------|--------------|----------------|----------------|--------------|--------------|----------------|-----|----|
| mm   | 0.68<br>0.58 | 0.4<br>0.3     | 0.135<br>0.100 | 1.25<br>1.15 | 0.85<br>0.75 | 1.7<br>1.5     | 0.1 | 5° |