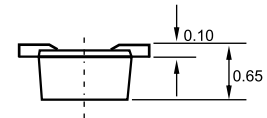
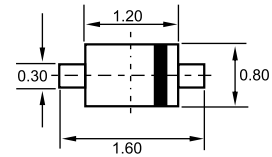

**SOD-523**

**Features**

- ✧ Extremely small surface mounting type.
- ✧ Small package.
- ✧ High speed and high reliability.

**Applications**

- ✧ High speed switching.

**Ordering Information**

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 1SS400   | A       | SOD-523      |

Dimensions in inches and (millimeters)

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

| Parameter                  | Symbol      | Limits  | Unit |
|----------------------------|-------------|---------|------|
| Peak reverse voltage       | $V_{RM}$    | 90      | V    |
| DC Reverse voltage         | $V_R$       | 80      | V    |
| Peak forward current(max.) | $I_{FM}$    | 225     | mA   |
| Forward output current     | $I_o$       | 100     | mA   |
| Surge current(1s)          | $I_{surge}$ | 0.5     | A    |
| Total power dissipation    | $P_{tot}$   | 150     | mW   |
| Junction temperature       | $T_j$       | 125     | °C   |
| Storage temperature        | $T_{stg}$   | -55-125 | °C   |

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

| Parameter             | Symbol   | Min. | Typ. | Max. | Unit    | Conditions                        |
|-----------------------|----------|------|------|------|---------|-----------------------------------|
| Forward voltage       | $V_F$    |      |      | 1.2  | V       | $I_F=100mA$                       |
| Reverse current       | $I_R$    |      |      | 0.1  | $\mu A$ | $V_R=80V$                         |
| Diode capacitance     | $C_d$    |      | 0.72 | 3.0  | pF      | $V_R=0.5V, f=1MHz$                |
| Reverse recovery time | $t_{rr}$ |      |      | 4    | ns      | $V_R=6V, I_F=10mA, R_L=100\Omega$ |



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

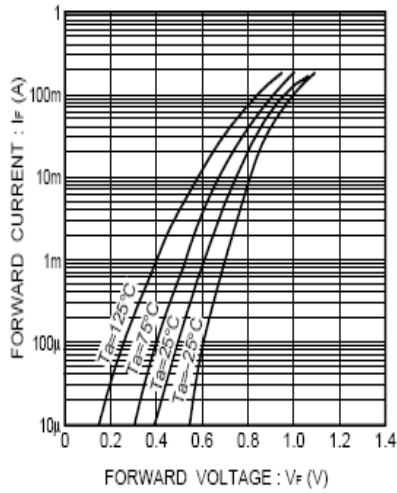


Fig.1 Forward characteristics

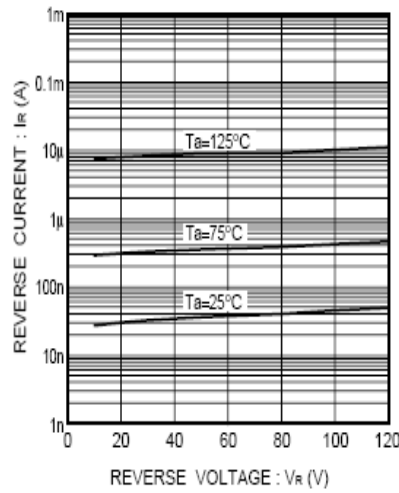


Fig.2 Reverse characteristics

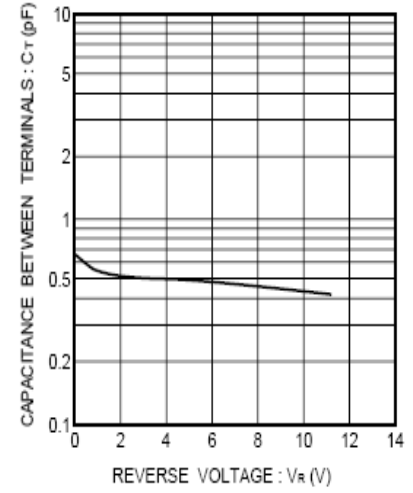


Fig.3 Capacitance between terminals

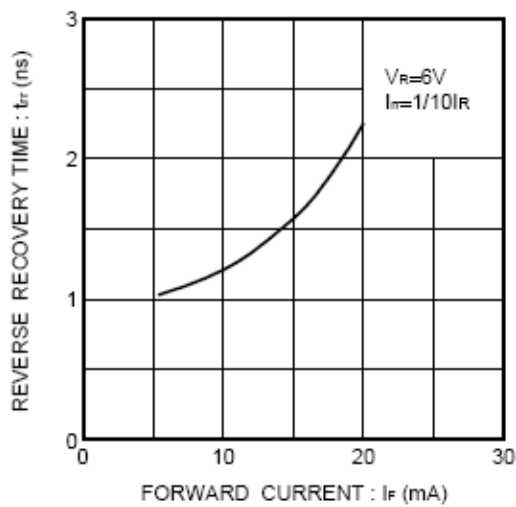


Fig.4 Reverse recovery time characteristics

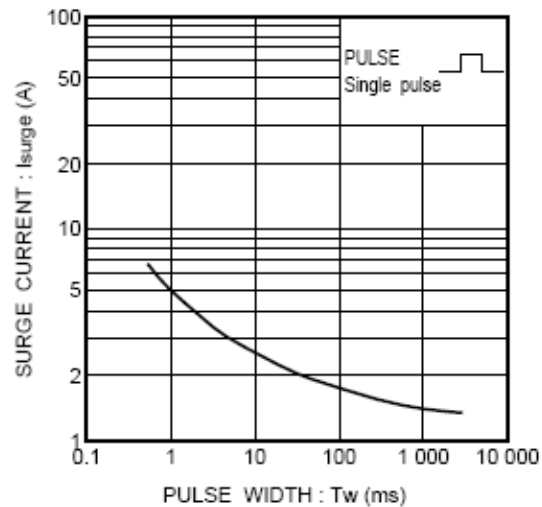


Fig.5 Surge current characteristics