

High Speed Switching Diodes

(Pb) Lead(Pb)-Free

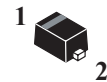
Features:

- *Extremely High Switching Speed.
- *Low Reverse Leakage Current.
- *High Reliability.
- *Small Outline Surface Mount SOD-523 Package.

Applications:

- *High Speed Switching.

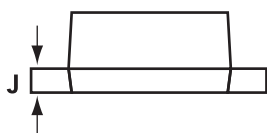
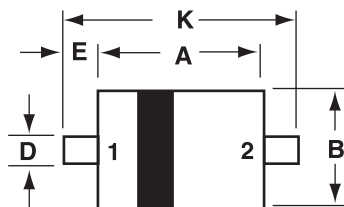
SWITCHING DIODE
100 mAMPERES
80 VOLTS



SOD-523

SOD-523 Outline Dimensions

Unit:mm



| SOD-523 | | |
|---------|------|------|
| Dim | Min | Max |
| A | 1.10 | 1.30 |
| B | 0.70 | 0.90 |
| C | 0.50 | 0.70 |
| D | 0.25 | 0.35 |
| E | 0.15 | 0.25 |
| J | 0.07 | 0.20 |
| K | 1.50 | 1.70 |

PIN 1. CATHODE
2. ANODE


1SS387**WEITRON****Maximum Ratings** ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

| Characteristic | Symbol | Value | Unit |
|---|-----------|-------------|--------------------|
| Peak Reverse Voltage | V_{RM} | 85 | V |
| DC Reverse Voltage | V_R | 80 | V |
| Peak Forward Current | I_{FM} | 200 | mA |
| Mean Rectifying Current | I_o | 100 | mA |
| Peak Forward Surge Current @ $t=1\text{S}$ | I_{FSM} | 1000 | mA |
| Operating Junction Temperature Range | T_J | 125 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 to +125 | |

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

| Characteristic | Symbol | Min | Typ | Max | Unit |
|---|----------------------------------|-------------|-------------------|---------------|---------------|
| Forward Voltage $I_F=1\text{ mA}$ $I_F=10\text{ mA}$ $I_F=100\text{ mA}$ | V_{F1} V_{F2} V_{F3} | - - - | 0.62 0.75 - | - - 1.2 | V |
| Reverse Current $V_R=30\text{V}$ $V_R=80\text{V}$ | I_{R1} I_{R2} | - - | - - | 0.1 0.5 | μA |
| Capacitance Between Terminals $V_R=0, f=1\text{MHz}$ | C_T | - | - | 3.0 | PF |
| Reverse Recovery Time $V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$ | T_{rr} | - | - | 4.0 | ns |

Device Marking

| Item | Marking | Equivalent Circuit diagram |
|--------|---------|---|
| 1SS387 | G |  |

WEITRON<http://www.weitron.com.tw>

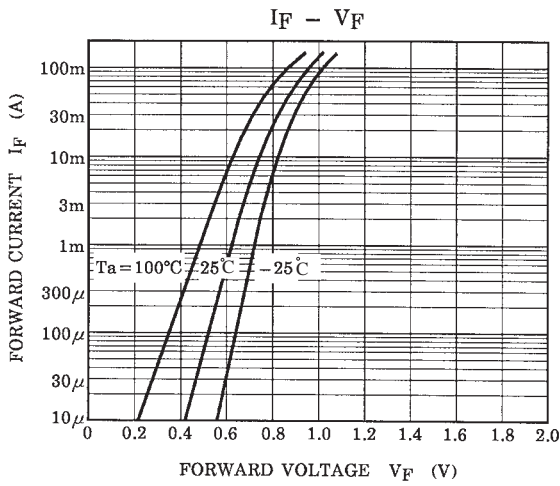


FIG.1 Forward Characteristics

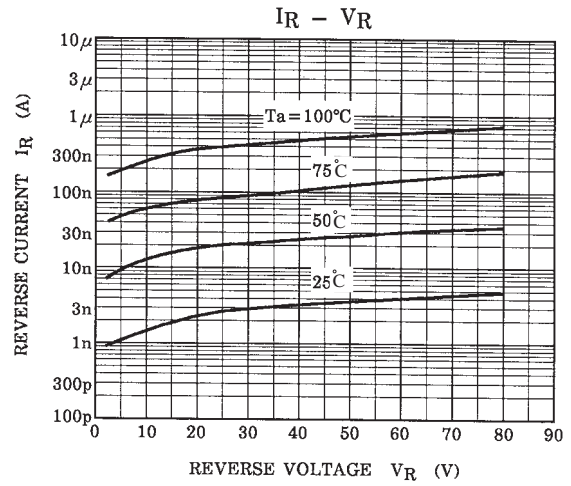


FIG.2 Reverse Characteristics

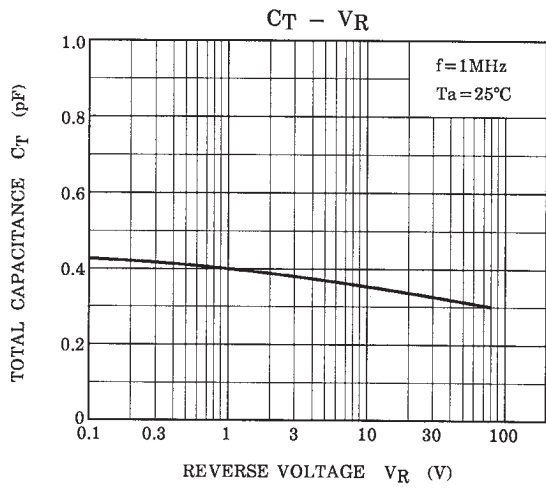


FIG.3 Capacitance Between Terminals

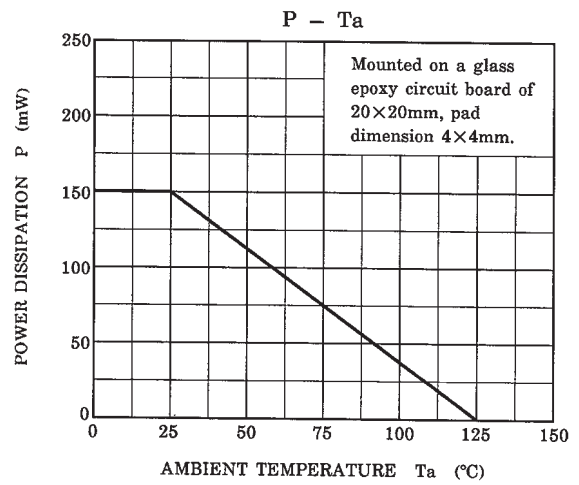


FIG.4 Power Derating Curve