

1SS400

Surface Mount Switching Diodes

Features

- Extremely High Switching Speed
- Low Reverse Leakage Current
- High Reliability
- Small Outline Surface Mount SOD-523 Package
- RoHS compliant package

Applications

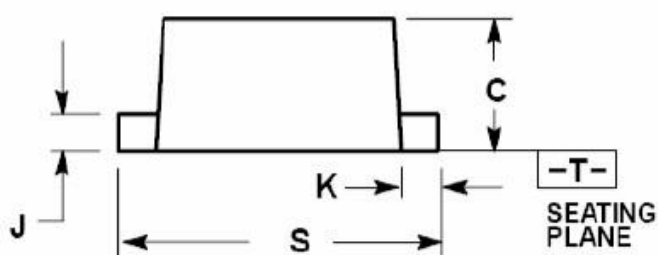
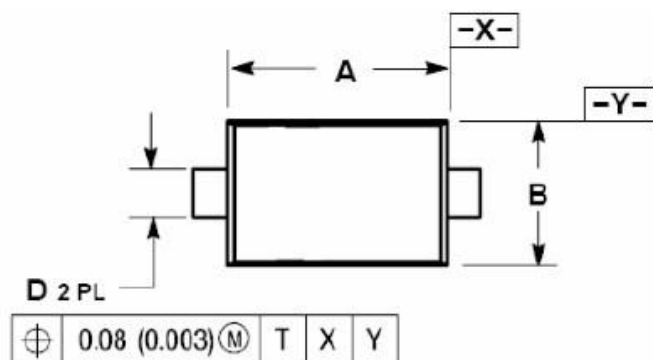
- High speed switching

Packing & Order Information

3,000/Reel



RoHS
COMPLIANT



| Dim | Millimeters | | | INCHES | | |
|-----|-------------|------|------|--------|--------|--------|
| | MIN | NOM | MAX | MIN | NOM | MAX |
| A | 1.10 | 1.20 | 1.30 | 0.043 | 0.047 | 0.051 |
| B | 0.70 | 0.80 | 0.90 | 0.028 | 0.032 | 0.035 |
| C | 0.50 | 0.60 | 0.70 | 0.020 | 0.024 | 0.028 |
| D | 0.25 | 0.30 | 0.35 | 0.010 | 0.012 | 0.014 |
| J | 0.07 | 0.14 | 0.20 | 0.0028 | 0.0055 | 0.0079 |
| K | 0.15 | 0.20 | 0.25 | 0.006 | 0.008 | 0.010 |
| S | 1.50 | 1.60 | 1.70 | 0.059 | 0.063 | 0.067 |

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)

| Parameter | Symbol | ISS400 | Unit |
|--------------------------------------|--------|------------|------|
| Maximum Peak Reverse Voltage | VRM | 90 | V |
| Maximum DC Reverse Voltage | VR | 80 | V |
| Maximum Average Forward Current | IF(AR) | 100 | mA |
| Peak Forward Surge Current@t=1S | IFSM | 500 | mA |
| Operating Junction Temperature Range | TJ | 125 | °C |
| Storage temperature range | TSTG | 40 to +125 | °C |

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Electrical characteristics (Tc=25°C unless otherwise noted)

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|--------|------|------|------|------|
| Reverse Breakdown Voltage (IR=100μA) | V(BR)R | 80 | -- | -- | V |
| Forward Voltage IF=100mA | VF | -- | -- | 1.2 | V |
| Reverse Current VR=80V | IR | -- | -- | 0.1 | μA |
| Capacitance between terminals VR=0.5V, f=1MHZ | CT | -- | -- | 3.0 | pF |
| Reverse Recovery Time VR=6V, IF=10mA,RL=100Ω | Trr | -- | -- | 4.0 | ns |

Device marking

| PART | MARK |
|--------|------|
| 1SS400 | A4 |

■ RATING AND CHARACTERISTIC CURVES

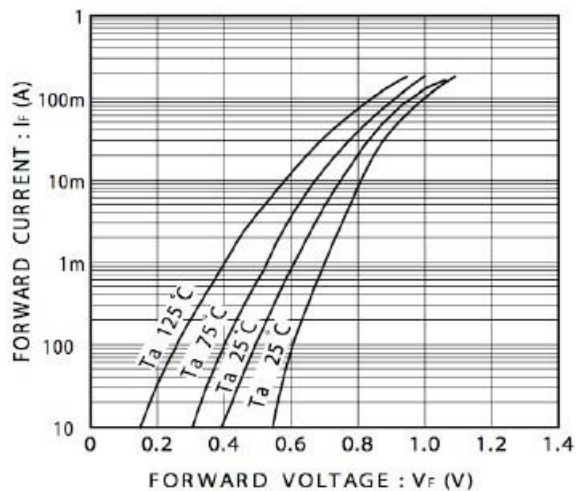


FIG.1- FORWARD CHARACTERISTICS

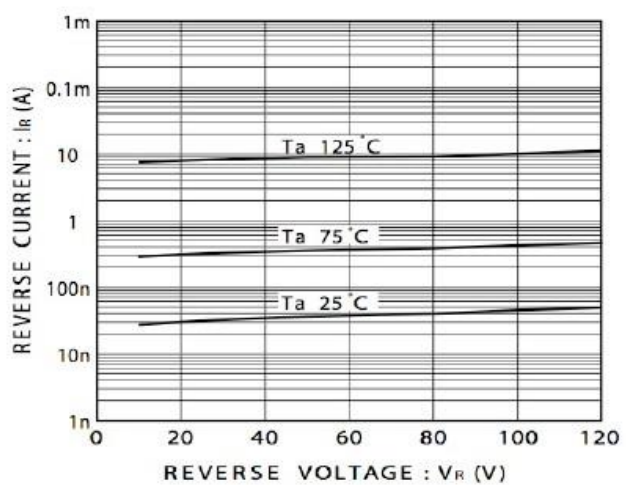


FIG.2- REVERSE CHARACTERISTICS

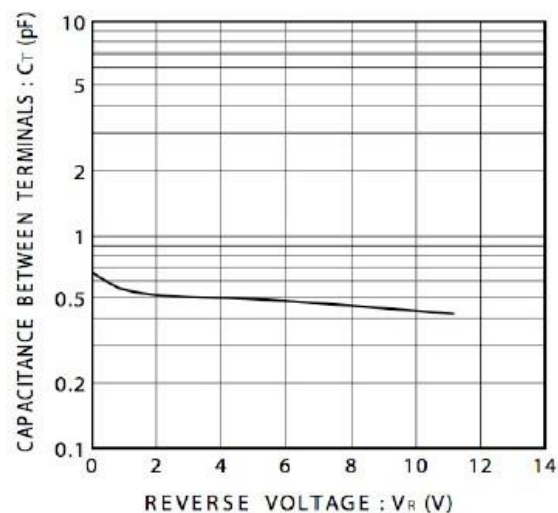


FIG.3- CAPACITANCE BETWEEN TERMINALS

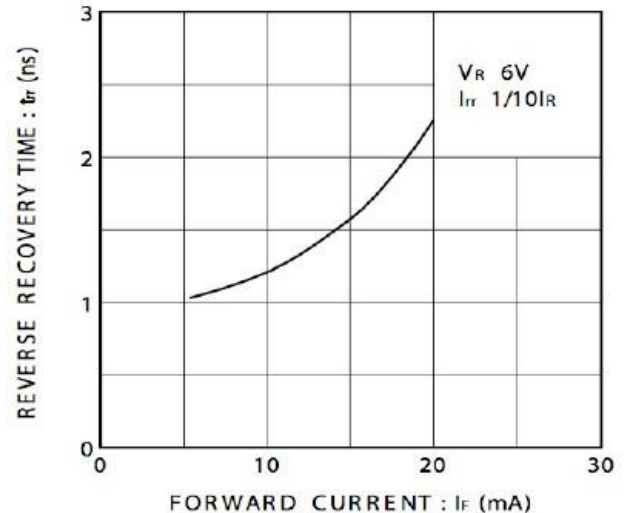


FIG.4- REVERSE RECOVERY TIME CHARACTERISTICS

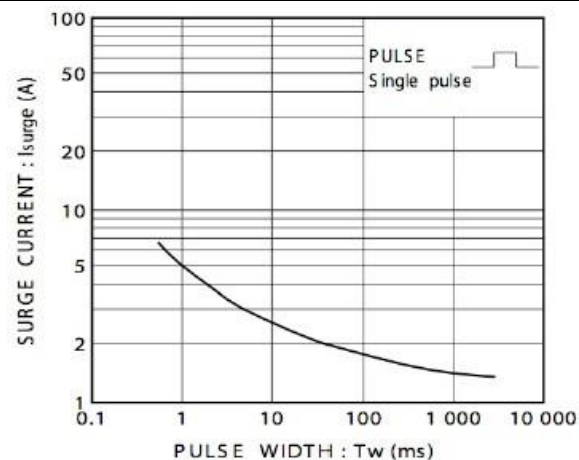


FIG.5- SURGE CURRENT CHARACTERISTIC

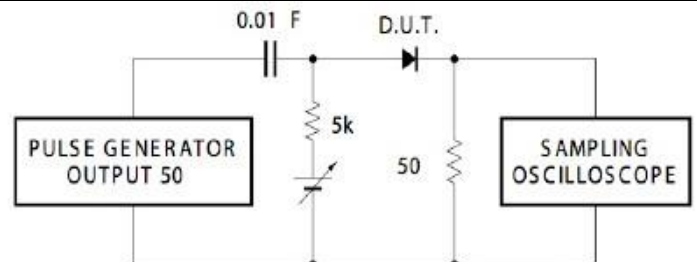


FIG.6- REVERSE RECOVERY TIME (TRR)
MEASUREMENT CIRCUIT

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