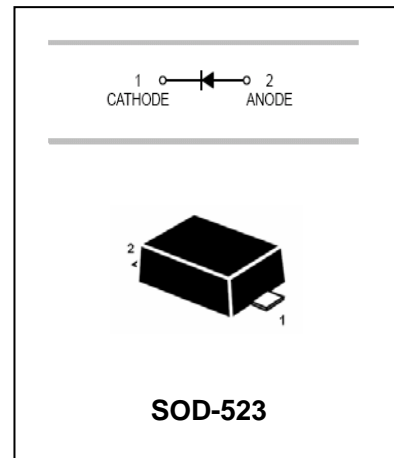


High speed Switching Diode

1SS422

FEATURES

- High reliability with high surge current handing capability.
- Small package.
- High speed.



APPLICATIONS

- High speed switching.

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 1SS422 | 6 | SOD-523 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Limits | Unit |
|----------------------------------|-----------|---------|------|
| Peak reverse voltage | V_{RM} | 100 | V |
| RMS Reverse voltage | V_{RMS} | 70 | V |
| DC Reverse voltage | V_R | 85 | V |
| Peak surge forward current @t=1s | I_{FSM} | 500 | mA |
| 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 | $I_F=150mA$ |
| Reverse current | I_R | | | 0.1 | μA | $V_R=85V$ |
| Diode capacitance | C_d | | | 3.0 | pF | $V_R=0.5V, f=1MHz$ |
| Reverse recovery time | t_{rr} | | | 4 | ns | $V_R=6V, I_F=10mA, R_L=100\Omega$ |

High speed Switching Diode

1SS422

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG. 1 - SURGE CURRENT CHARACTERISTICS

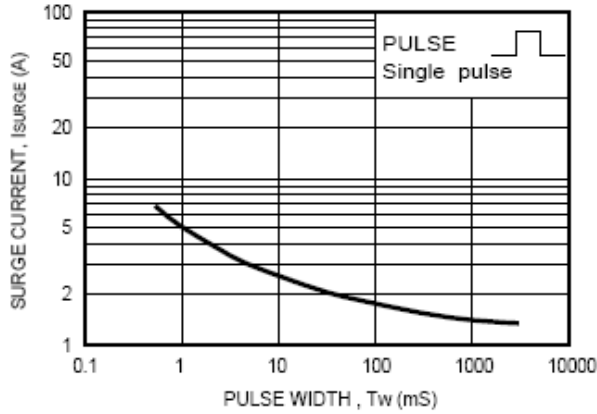


FIG. 2 - FORWARD CHARACTERISTICS

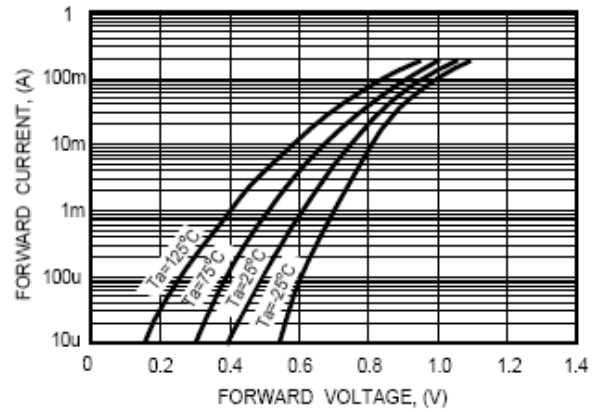


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

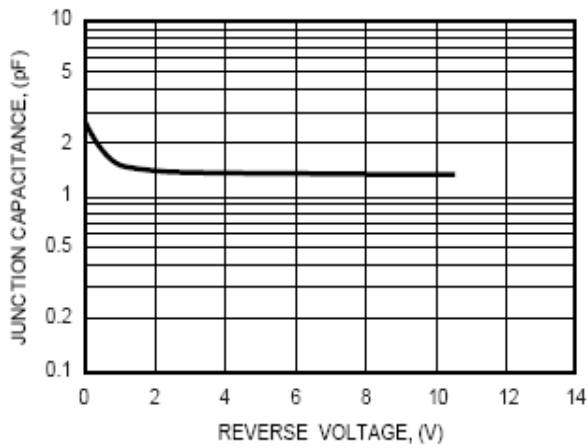


FIG. 4 - REVERSE CHARACTERISTICS

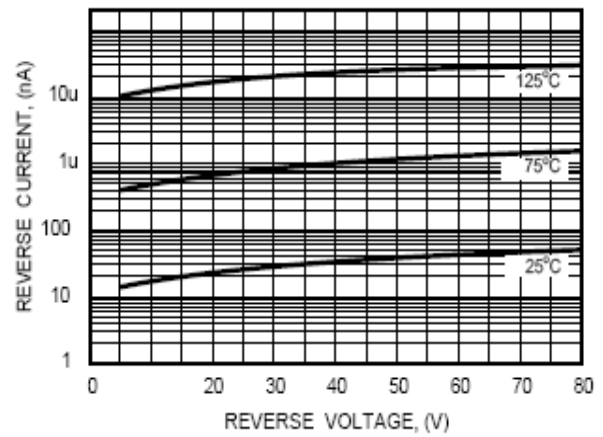
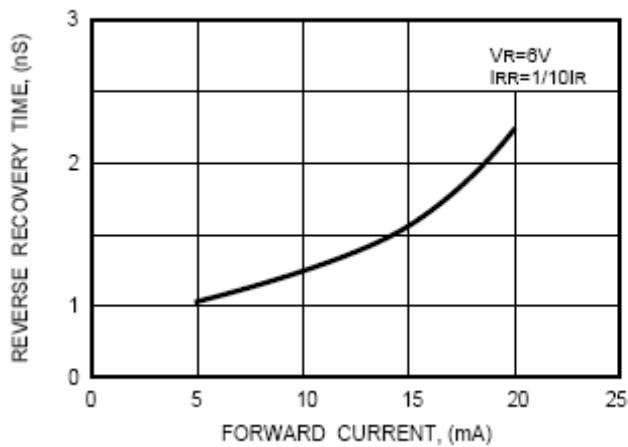


FIG. 5 - REVERSE RECOVERY TIME



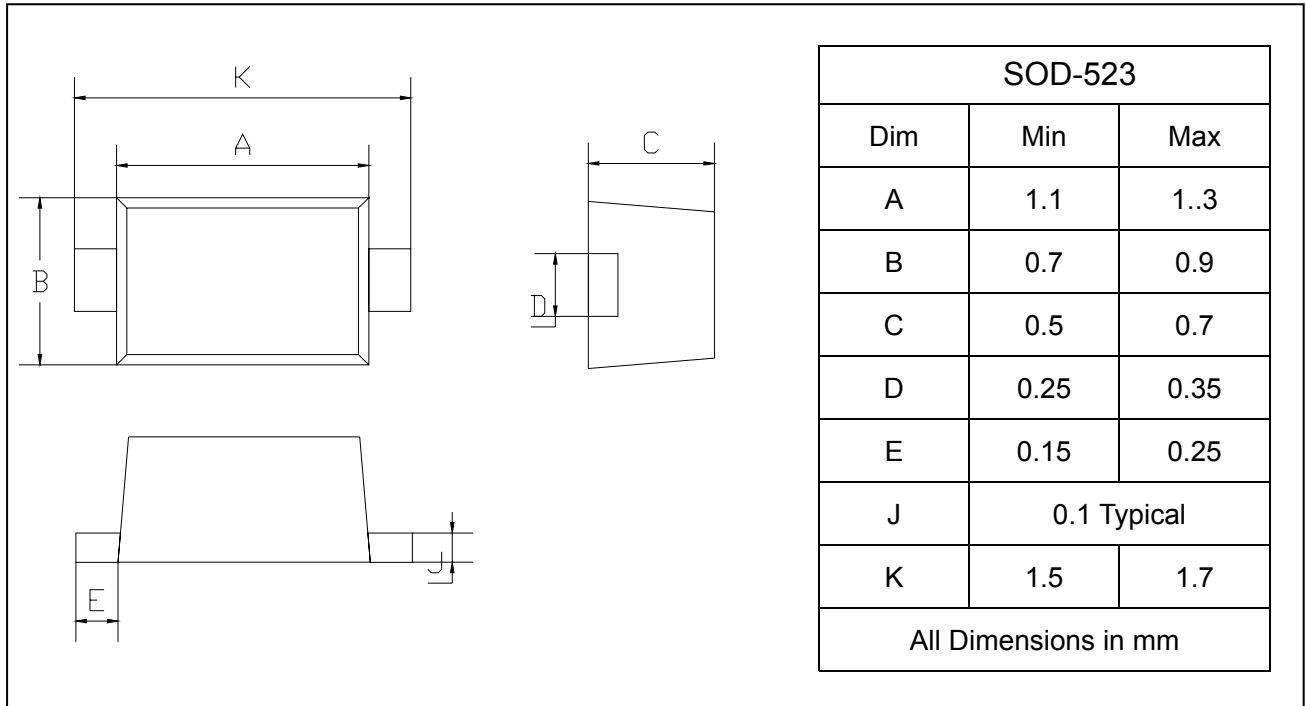
High speed Switching Diode

1SS422

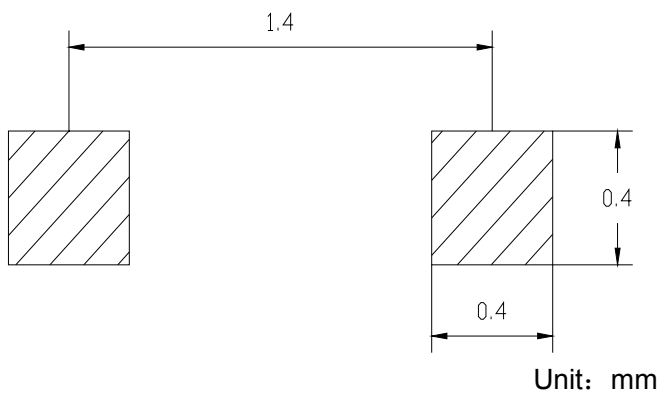
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|----------------|
| 1SS422 | SOD-523 | 3000/Tape&Reel |

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