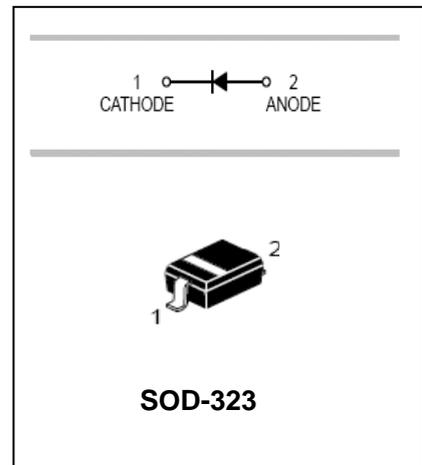


Silicon Epitaxial Planar Diode

1SS403

FEATURES

- Two-pin small packages are suitable for higher mounting densities.
- Excellent in forward current and forward voltage characteristic : $V_F(2) = 0.90V$ (typ.)
- Fast reverse recovery time : $t_{rr} = 60ns$ (typ.)
- Small total capacitance : $C_T = 1.5pF$ (typ.)



APPLICATIONS

- High speed switching

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 1SS403 | F5 | SOD-323 |

MAXIMUM RATING @ $T_a=25^\circ C$ unless otherwise specified

| Parameter | Symbol | VALUE | Unit |
|--------------------------------|-----------|-------------|------------|
| Maximum (peak) reverse voltage | V_{RM} | 250 | V |
| Reverse Voltage | V_R | 200 | V |
| Average forward Current | I_O | 100 | mA |
| Surge current (10ms) | I_{FSM} | 2 | A |
| Power Dissipation | P_D | 200 | mW |
| Junction temperature | T_J | 125 | $^\circ C$ |
| Storage temperature | T_{STG} | -55 to +125 | $^\circ C$ |

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

Silicon Epitaxial Planar Diode

1SS403

| Parameter | Symbol | Min. | TYP. | Max. | Unit | Conditions |
|-------------------------------|------------|------|------|------|---------------|--------------------------------|
| Forward voltage | $V_{F(1)}$ | - | 0.72 | 1.0 | V | $I_F=10\text{mA}$ |
| | $V_{F(2)}$ | - | 0.90 | 1.2 | | $I_F=100\text{mA}$ |
| Reverse current | I_R | - | - | 0.1 | μA | $V_R=50\text{V}$ |
| | | - | - | 1.0 | | $V_R=200\text{V}$ |
| Total capacitance | C_T | - | 1.5 | 3.0 | pF | $V_R=0\text{V}, f=1\text{MHz}$ |
| Capacitance between terminals | t_{rr} | - | 10 | 60 | ns | $I_F = 10\text{mA}$ (Fig. 1) |

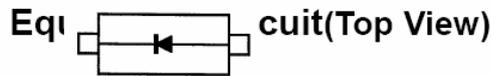
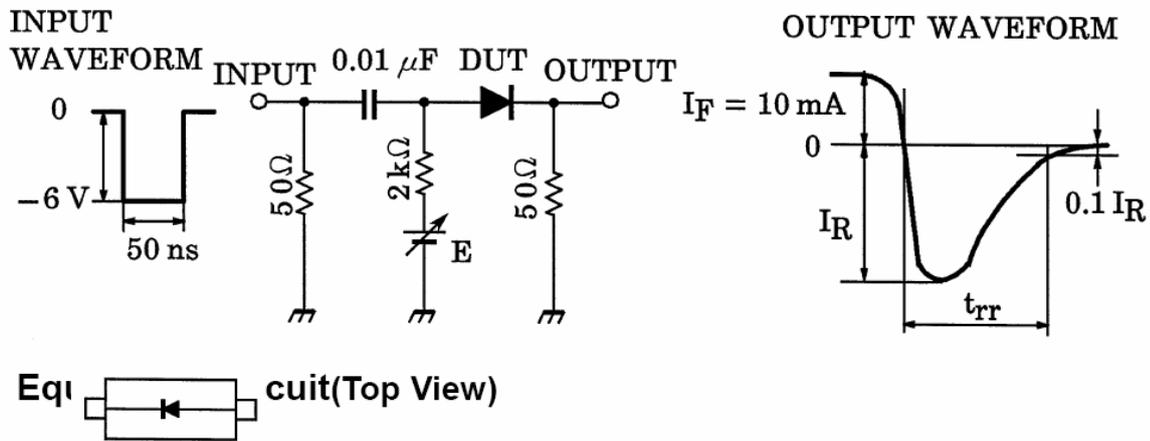
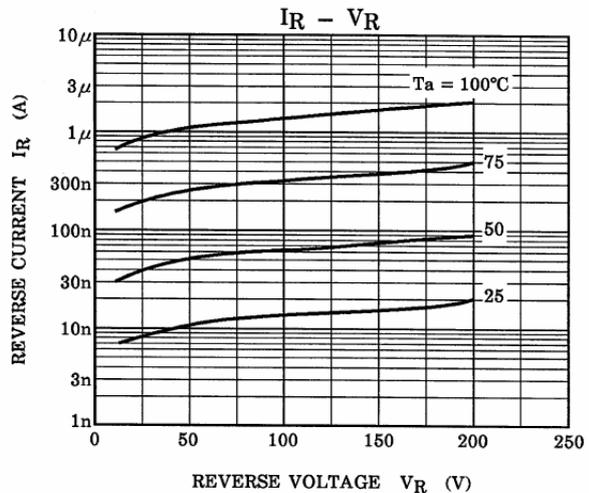
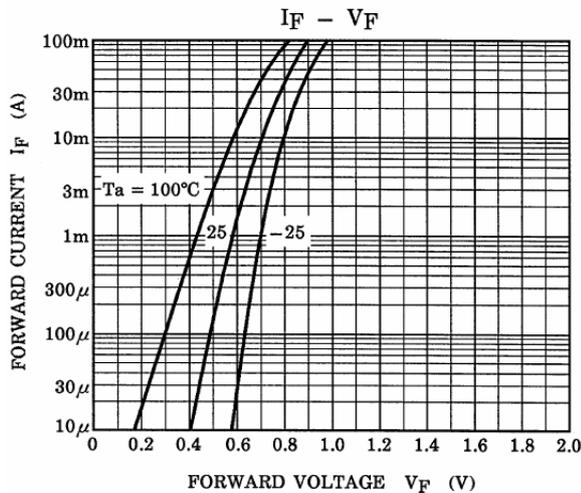


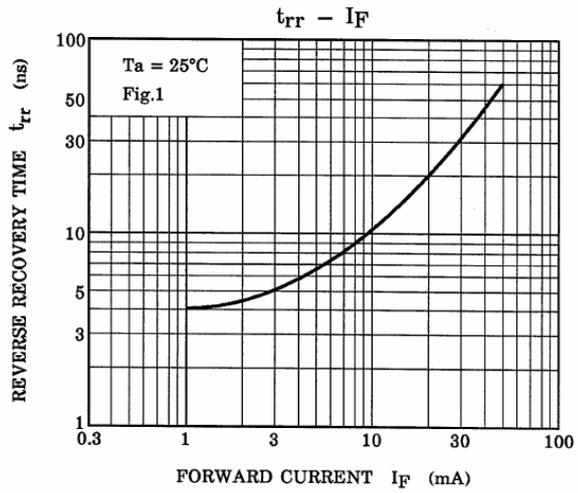
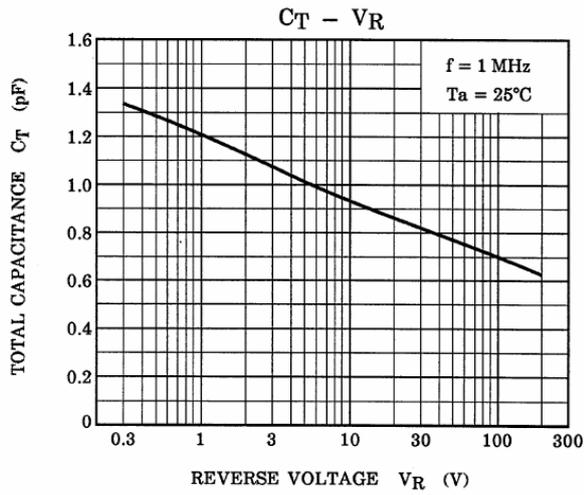
Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit

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



Silicon Epitaxial Planar Diode

1SS403



PACKAGE OUTLINE

Plastic surface mounted package

SOD-323

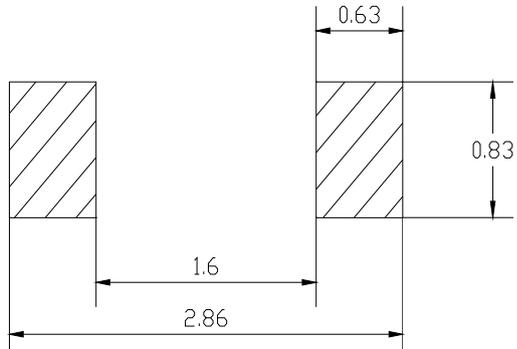
| SOD-323 | | |
|----------------------|--------------|-------|
| Dim | Min | Max |
| A | 1.275 | 1.325 |
| B | 1.675 | 1.725 |
| C | 0.9 Typical | |
| D | 0.30 Typical | |
| E | 0.27 | 0.37 |
| H | 0.02 | 0.1 |
| J | 0.1 Typical | |
| K | 2.6 | 2.7 |
| All Dimensions in mm | | |



Silicon Epitaxial Planar Diode

1SS403

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|----------------|
| 1SS403 | SOD-323 | 3000/Tape&Reel |