

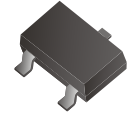
SMD Switching Diode



SMD Diodes Specialist

CDST193-G

RoHS Device

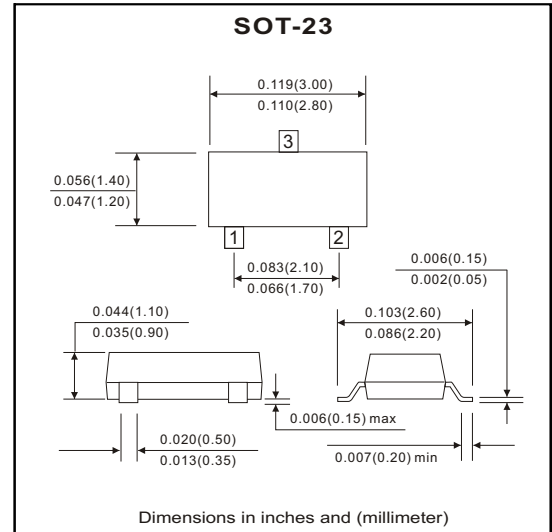


Features

- Low forward voltage: $V_F=0.9V$ (Typ.)
- Fast reverse recovery time: $t_{rr}=1.6nS$ (Typ.)

Polarity: 1. ANODE
2. N.C.
3. CATHODE

Marking: F3



Maximum Ratings (at $T_a=25^{\circ}C$ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|-------------------------------------|-----------|------------|-------------|
| Non-repetitive peak reverse voltage | V_{RM} | 85 | V |
| DC blocking voltage | V_R | 80 | V |
| Forward continuous current | I_{FM} | 300* | mA |
| Average rectified output current | I_o | 100* | mA |
| Power dissipation | P_D | 150 | mW |
| Junction temperature | T_J | 125 | $^{\circ}C$ |
| Storage temperature | T_{STG} | -55 ~ +125 | $^{\circ}C$ |

*Unit rating. Total rating=Unit rating \times 1.5

Electrical Characteristics (at $T_a=25^{\circ}C$ unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Min | Max | Unit |
|-------------------------------|---------------------------------------|-------------|-----|------|-----|---------|
| Reverse breakdown voltage | $I_R=100\mu A$ | $V_{(BR)R}$ | 80 | | | V |
| Forward voltage | $I_F=1mA$ | V_{F1} | | 0.60 | | V |
| | $I_F=10mA$ | V_{F2} | | 0.72 | | V |
| | $I_F=100mA$ | V_{F3} | | 0.90 | 1.2 | V |
| Reverse current | $V_R=30V$ | I_{R1} | | | 0.1 | μA |
| | $V_R=80V$ | I_{R2} | | | 0.5 | μA |
| Capacitance between terminals | $V_R=0V, f=1MHz$ | C_T | | 0.90 | 3.0 | pF |
| Reverse recovery time | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R$ | t_{rr} | | 1.60 | 4.0 | nS |

RATING AND CHARACTERISTIC CURVES (CDST193-G)

Fig.1 Forward Voltage Characteristics

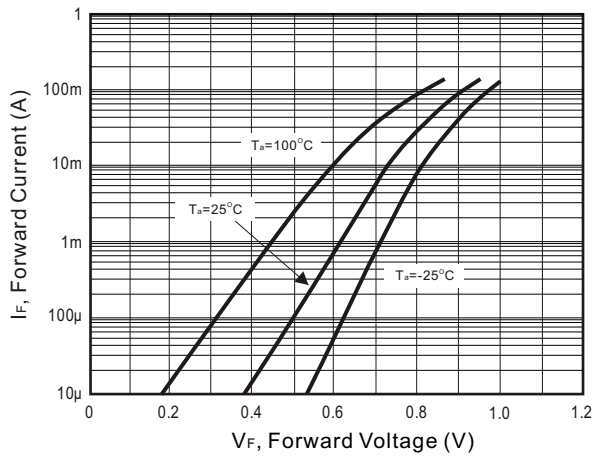


Fig.2 Reverse Characteristics

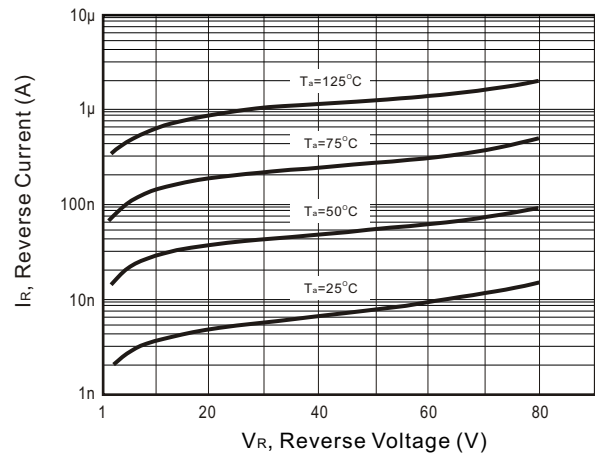


Fig.3 Capacitance Between Terminals

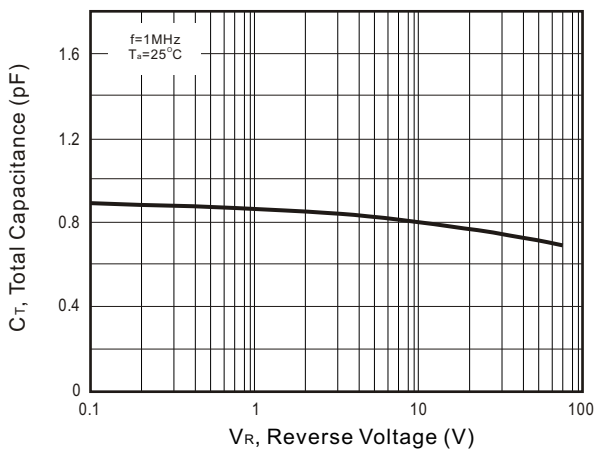


Fig.4 Reverse Recovery Time Characteristics

