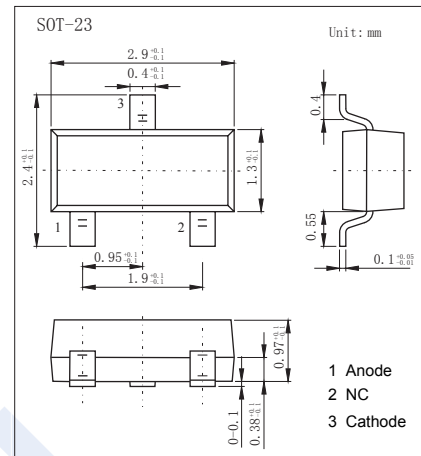
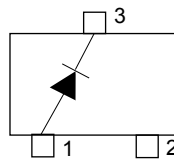


Switching Diodes

HSM83 (KSM83)

■ Features

- High reverse voltage. ($V_R = 250V$)
- Silicon Epitaxial Planar Diode for High Voltage Switching

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|--|-----------|------------|------------------|
| Peak Reverse Voltage | V_{RM} | 300 | V |
| DC Blocking Voltage | V_R | 250 | |
| Average Rectified Output Current | I_o | 100 | mA |
| Peak Forward Surge Current | I_{FM} | 300 | |
| Non-Repetitive Peak Forward Surge Current (Note.1) | I_{FSM} | 2 | A |
| Junction Temperature | T_J | 125 | $^\circ\text{C}$ |
| Storage Temperature range | T_{stg} | -55 to 125 | |

Note.1: Value at duration of 10msec.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------------|----------|--|-----|-----|-----|---------------|
| Reverse breakdown voltage | V_R | $I_R = 100 \mu\text{A}$ | 300 | | | V |
| Forward voltage | V_F | $I_F = 100 \text{mA}$ | | | 1.2 | |
| Reverse voltage leakage current | I_{R1} | $V_R = 250 \text{V}$ | | | 0.2 | μA |
| | I_{R2} | $V_R = 300 \text{V}$ | | | 100 | |
| Capacitance between terminals | C_T | $V_R = 0 \text{V}, f = 1 \text{MHz}$ | | 1.5 | 3 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 30 \text{mA}, I_{rr} = 3 \text{mA}, R_L = 100 \Omega$ | | | 100 | ns |

■ Marking

| | |
|---------|----|
| Marking | F7 |
|---------|----|

Switching Diodes

HSM83 (KSM83)

■ Typical Characteristics

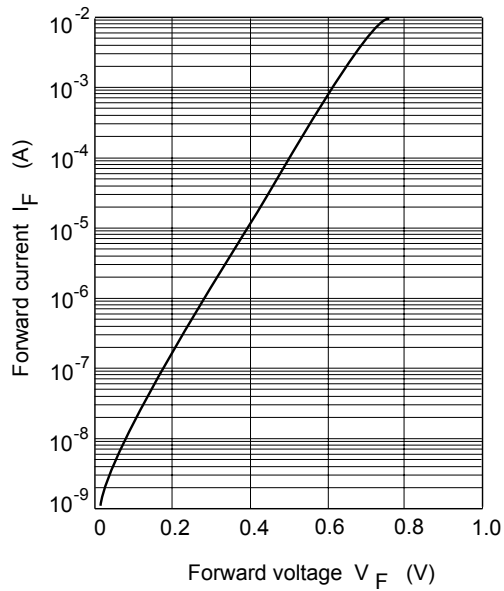


Fig.1 Forward current Vs. Forward voltage

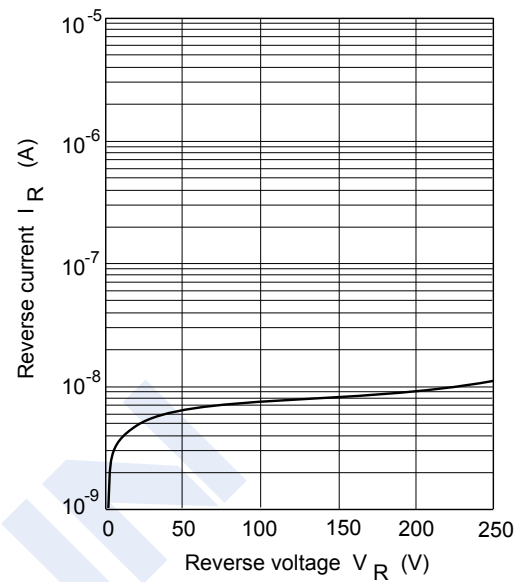


Fig.2 Reverse current Vs. Reverse voltage

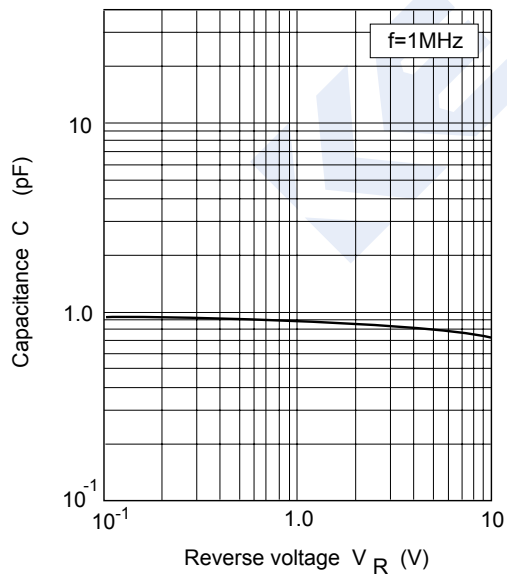


Fig.3 Capacitance Vs. Reverse voltage