

HSS82 Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

Rev. 1
Jul. 1995

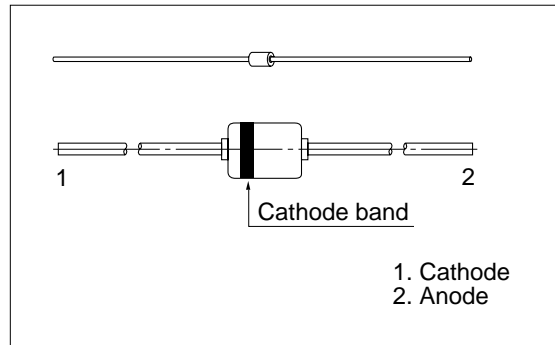
Features

- High reverse voltage. ($V_R=200V$)
- Suitable for 5mm pitch high speed automatical insertion.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

| Type No. | Cathode band | Package Code |
|----------|--------------|--------------|
| HSS82 | Navy Blue | MHD |

Outline



Absolute Maximum Ratings ** ($T_a = 25^\circ C$)

| Item | Symbol | Value | Unit |
|---|----------------|-------------|------------|
| Peak reverse voltage | V_{RM}^* | 250 | V |
| Reverse voltage | V_R | 200 | V |
| Peak forward current | I_{FM} | 625 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^{**} | 1 | A |
| Average forward current | I_o | 150 | mA |
| Power dissipation | P_d | 400 | mW |
| Junction temperature | T_j | 200 | $^\circ C$ |
| Storage temperature | T_{stg} | -65 to +175 | $^\circ C$ |

* Reverse voltage in excess of peak reverse voltage may deteriorate electrical characteristic.

** Within 1s forward surge current.

Electrical Characteristics ($T_a = 25^\circ C$)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-----------------------|----------|-----|-----|-----|---------|---|
| Forward voltage | V_F | — | — | 1.0 | V | $I_F = 100 \text{ mA}$ |
| Reverse current | I_{R1} | — | — | 0.2 | μA | $V_R = 200 \text{ V}$ |
| | I_{R2} | — | — | 100 | | $V_R = 250 \text{ V}$ |
| Capacitance | C | — | 1.5 | — | pF | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ |
| Reverse recovery time | t_{rr} | — | — | 100 | ns | $I_F=I_R=30\text{mA}, I_{rr}=3\text{mA}, R_L=100\Omega$ |

HSS82

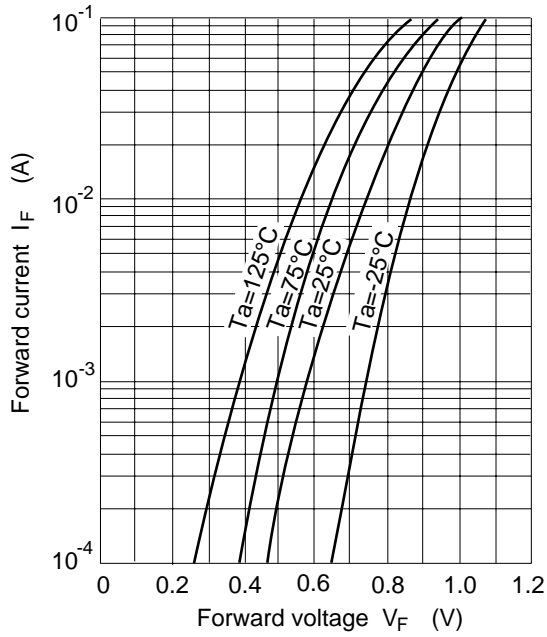


Fig.1 Forward current Vs. Forward voltage

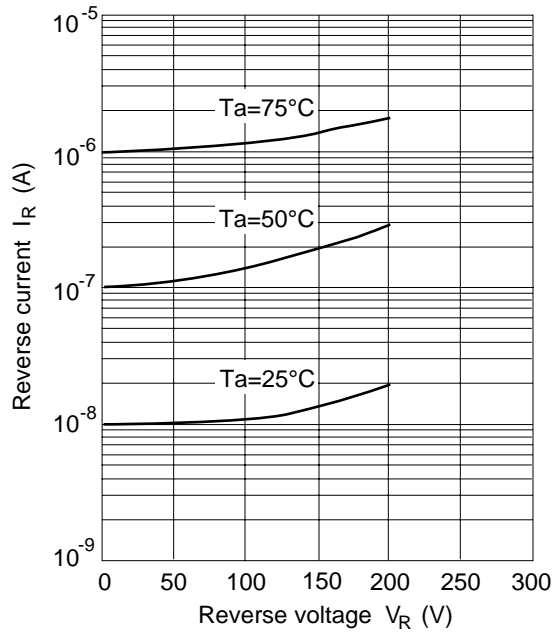


Fig.2 Reverse current Vs. Reverse voltage

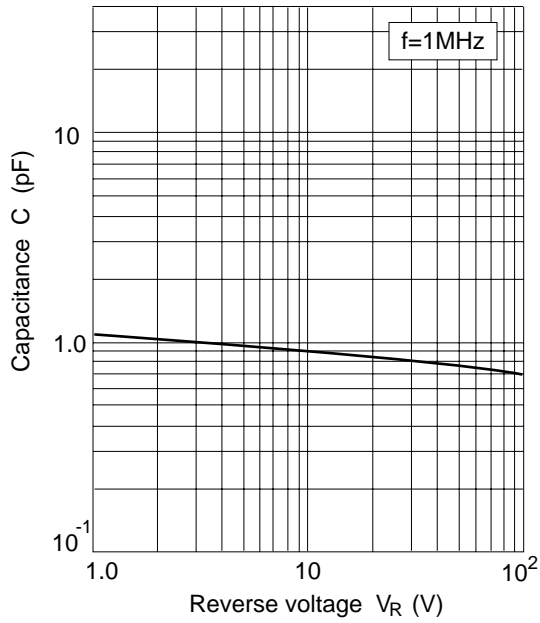
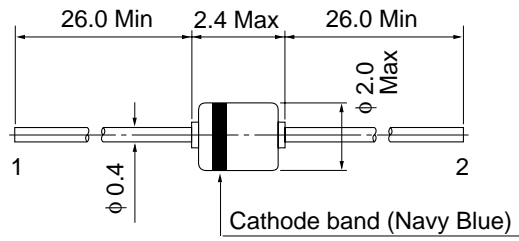


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

| | |
|--------------|-------|
| HITACHI Code | MHD |
| JEDEC Code | DO-34 |
| EIAJ Code | — |
| Weight (g) | 0.084 |