
HSS81

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-175B (Z)

Rev.2
Oct. 2000

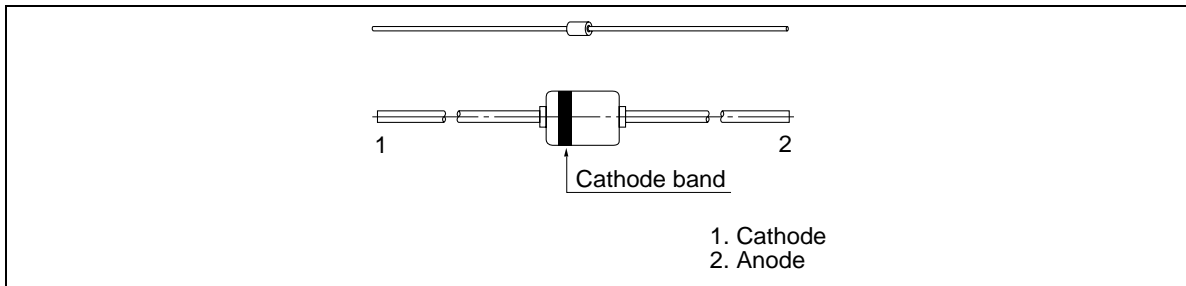
Features

- High reverse voltage. ($V_R = 150\text{ V}$)
- Suitable for 5 mm pitch high speed automatic insertion.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

| Type No. | Cathode band | Package Code |
|----------|--------------|--------------|
| HSS81 | Green | MHD |

Outline



HSS81

Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|---|----------------|-------------|------|
| Peak reverse voltage | V_{RM}^{*1} | 200 | V |
| Reverse voltage | V_R | 150 | V |
| Peak forward current | I_{FM} | 625 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^{*2} | 1 | A |
| Average forward current | I_O | 150 | mA |
| Power dissipation | Pd | 400 | mW |
| Junction temperature | Tj | 200 | °C |
| Storage temperature | Tstg | -65 to +175 | °C |

Notes: 1. Reverse voltage in excess of peak reverse voltage may deteriorate electrical characteristic.
2. Within 1s forward surge current.

Electrical Characteristics

(Ta = 25°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 | $V_R = 150 \text{ V}$ |
| | I_{R2} | — | — | 100 | | $V_R = 200 \text{ V}$ |
| Capacitance | C | — | 1.5 | — | pF | $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$ |
| Reverse recovery time | t_{rr} | — | — | 100 | ns | $I_F = I_R = 30 \text{ mA}$, $I_{rr} = 3 \text{ mA}$, $R_L = 100 \Omega$ |

Main Characteristic

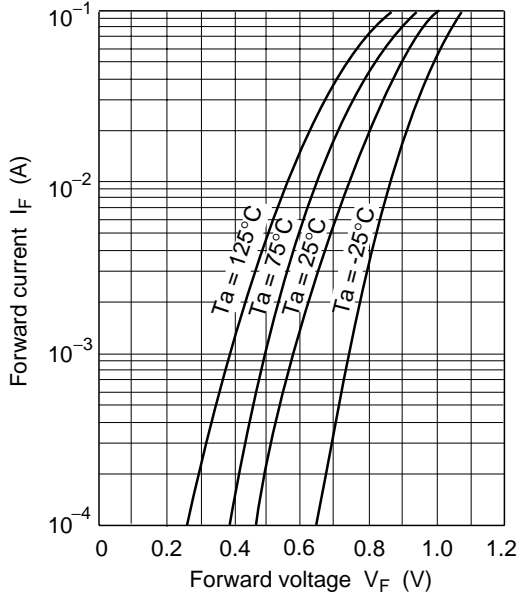


Fig.1 Forward current Vs. Forward voltage

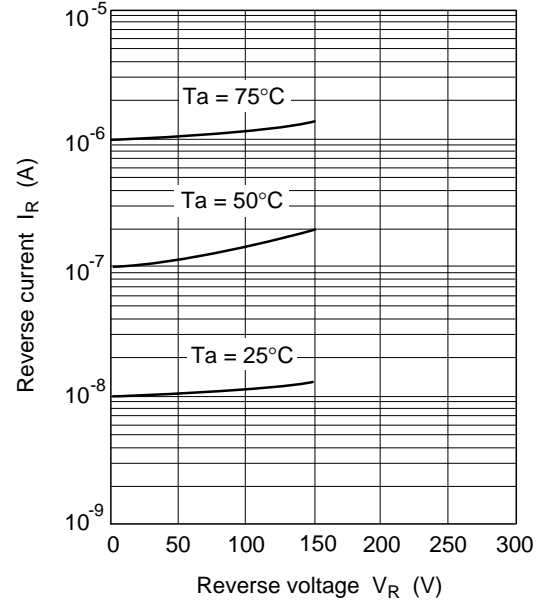


Fig.2 Reverse current Vs. Reverse voltage

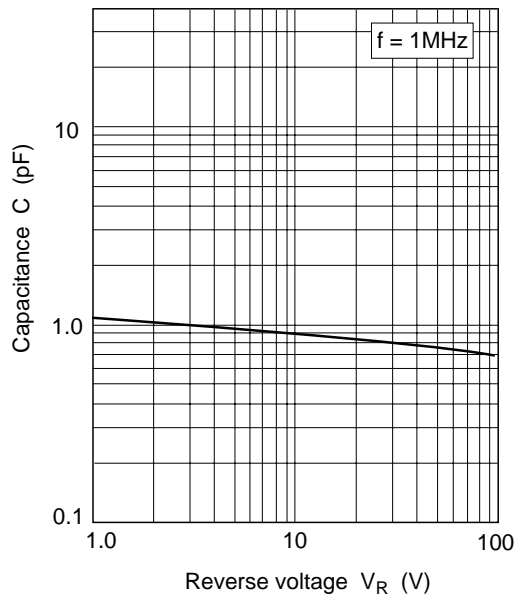
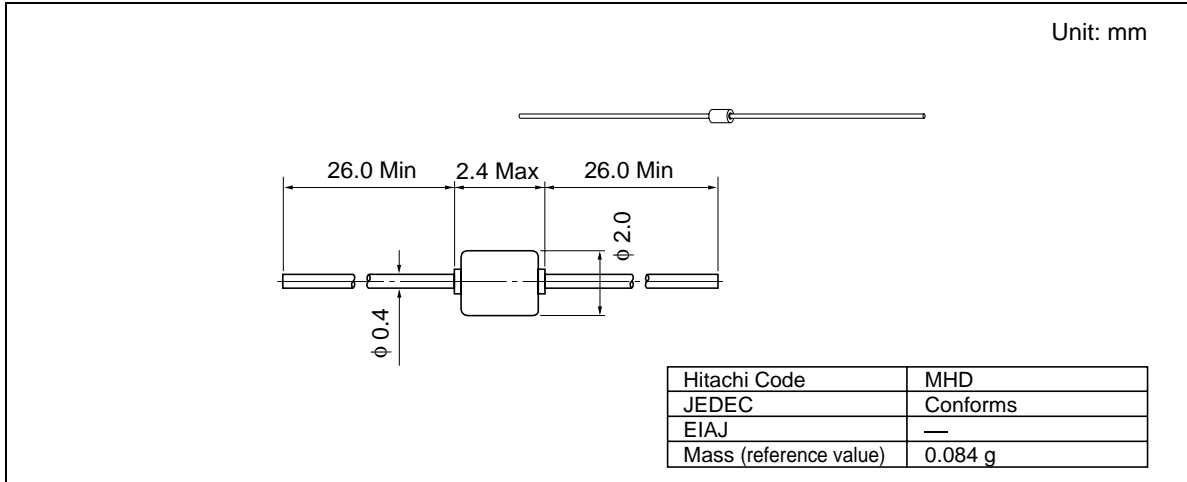


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions



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