

HVM187S

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

HITACHI

ADE-208-055C (Z)

Rev. 3

Jun. 1993

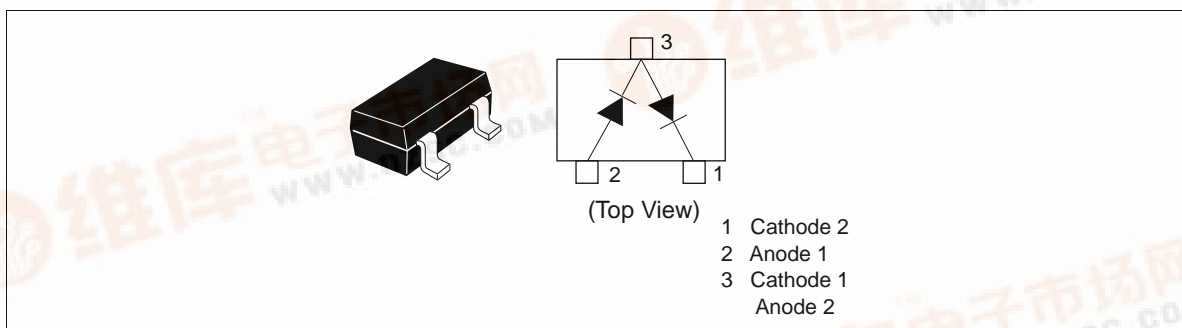
Features

- Low forward resistance. ($r_f = 5.5$ max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVM187S | H3 | MPAK |

Pin Arrangement



HVM187S

Absolute Maximum Ratings (Ta = 25°C)

| Item | Symbol | Value | Unit |
|----------------------|-----------|-------------|------|
| Reverse voltage | V_R | 60 | V |
| Forward current | I_F | 50 | mA |
| Power dissipation | P_d^* | 100 | mW |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

Note: Per one device

Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------|--------|-----|-----|-----|----------|---|
| Forward voltage | V_F | — | — | 1.0 | V | $I_F = 10\text{mA}$ |
| Reverse current | I_R | — | — | 100 | nA | $V_R = 60\text{V}$ |
| Capacitance | C | — | — | 2.4 | pF | $V_R = 0\text{V}$, $f = 1\text{MHz}$ |
| Forward resistance | r_f | 3.5 | — | 5.5 | Ω | $I_F = 10\text{mA}$, $f = 100\text{MHz}$ |
| ESD-Capability | — | 200 | — | — | V | *C = 200pF, Both forward and reverse direction 1 pulse. |

Note: Failure criterion; $I_R \geq 100\text{nA}$ at $V_R = 60\text{V}$

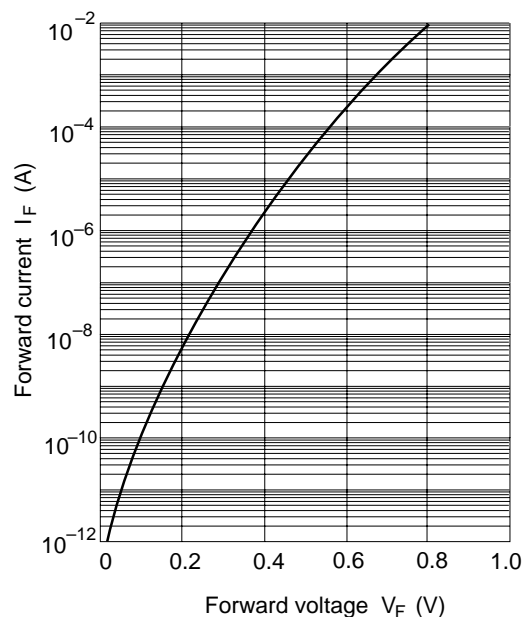
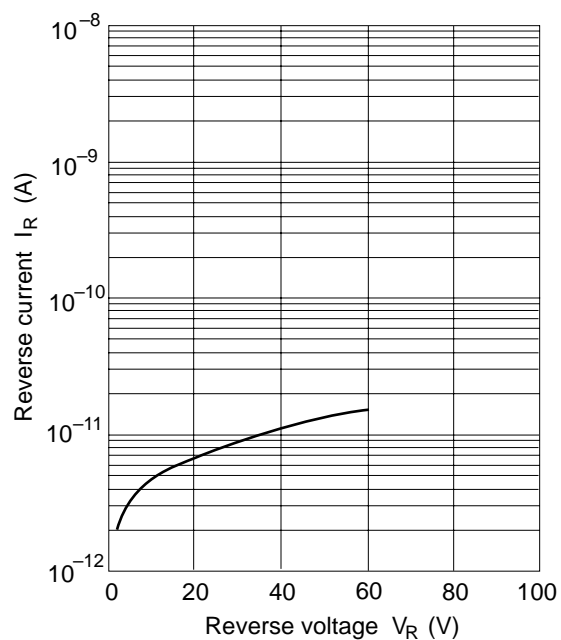
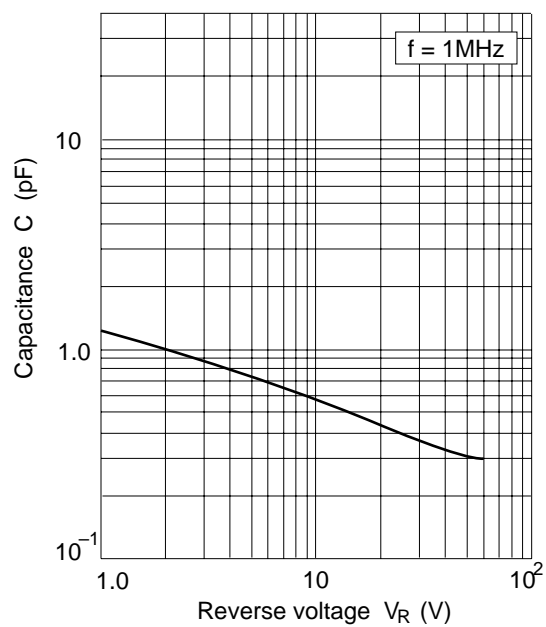


Fig.1 Forward current Vs. Forward voltage

**Fig.2 Reverse current Vs. Reverse voltage****Fig.3 Capacitance Vs. Reverse voltage**

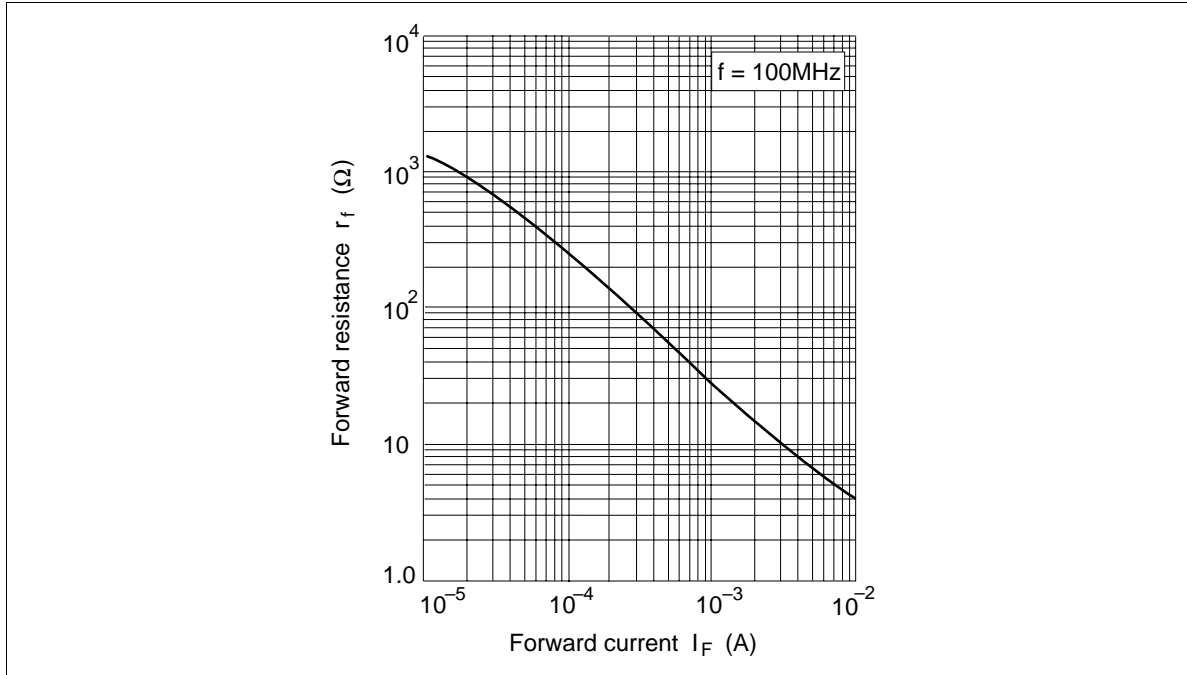
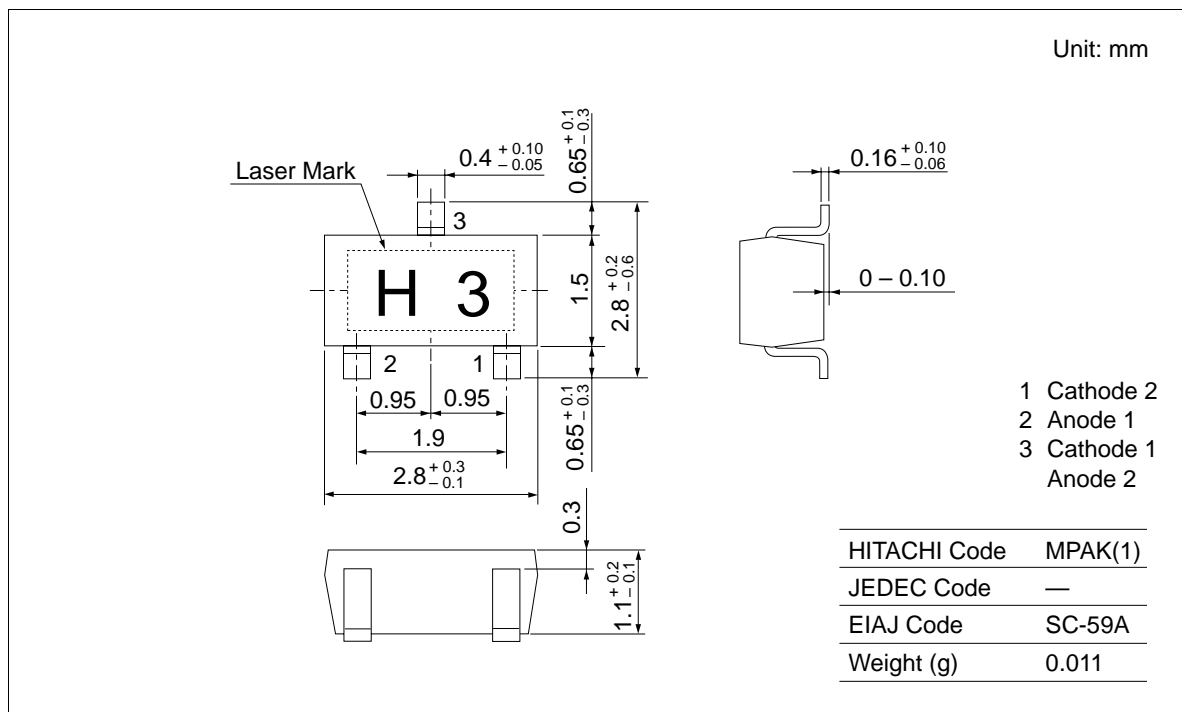


Fig.4 Forward resistance Vs. Forward current

Package Dimensions



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