

HSM2692

Silicon Epitaxial Planar Diode for Tuner Band Switch

HITACHI

Preliminary
Rev. 1
Jun. 1993

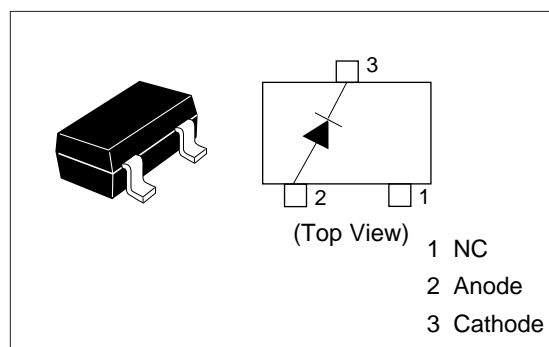
Features

- Low forward resistance. ($r_f=0.9\Omega$ max)
- Low capacitance. ($C=1.2\text{pF}$ max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HSM2692 | B 1 | MPAK |

Pin Arrangement



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

| Item | Symbol | Value | Unit |
|-----------------------|------------------|-------------|------------------|
| Reverse voltage | V_R | 35 | V |
| Power dissipation | P_d | 150 | mW |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -45 to +125 | $^\circ\text{C}$ |
| Operation temperature | T_{opr} | -20 to +60 | $^\circ\text{C}$ |

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

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------|--------|-----|-----|-----|----------|---|
| Reverse voltage | V_R | 35 | — | — | V | $I_R = 10 \mu\text{A}$ |
| Reverse current | I_R | — | — | 50 | nA | $V_R = 25 \text{V}$ |
| Forward voltage | V_F | — | — | 1.0 | V | $I_F = 10 \text{mA}$ |
| Capacitance | C | — | — | 1.2 | pF | $V_R = 6 \text{V}, f = 1 \text{MHz}$ |
| Forward resistance | r_f | — | — | 0.9 | Ω | $I_F = 2 \text{mA}, f = 100 \text{MHz}$ |

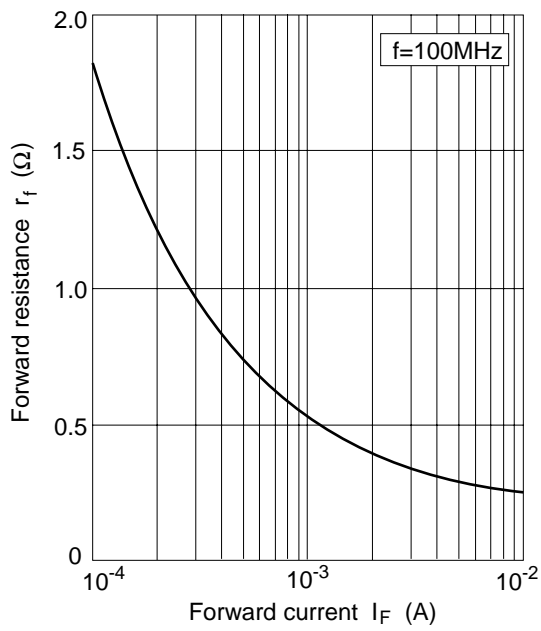


Fig.1 Forward resistance Vs. Forward current

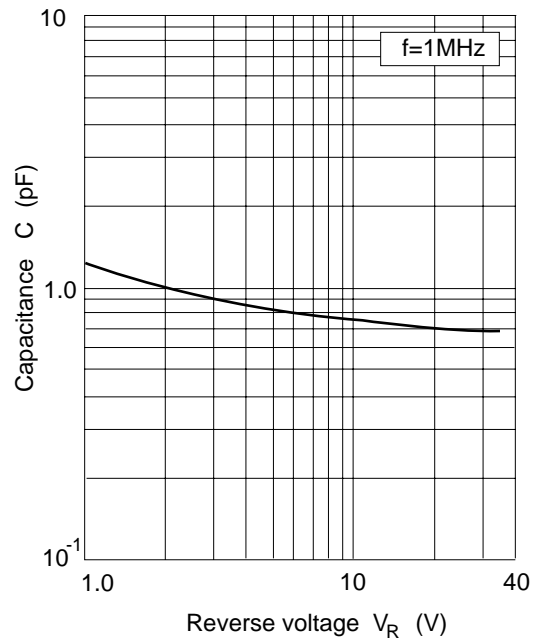


Fig.2 Capacitance Vs. Reverse voltage

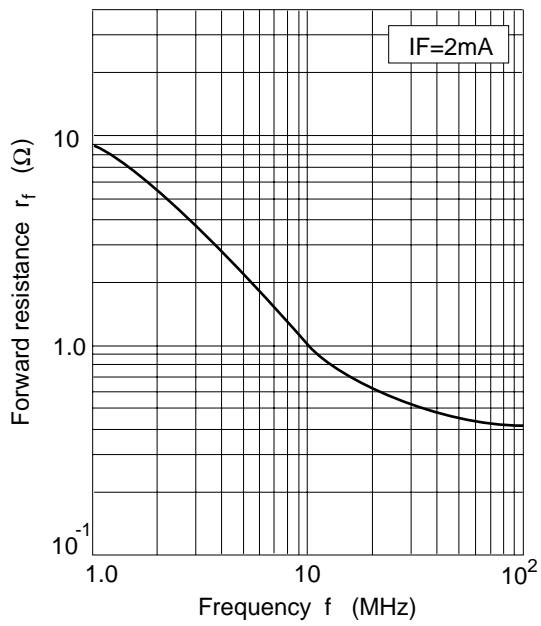


Fig.3 Forward resistance Vs. Frequency

Package Dimensions

Unit: mm

