

HSM124S

Silicon Epitaxial Planar Diode for Switching

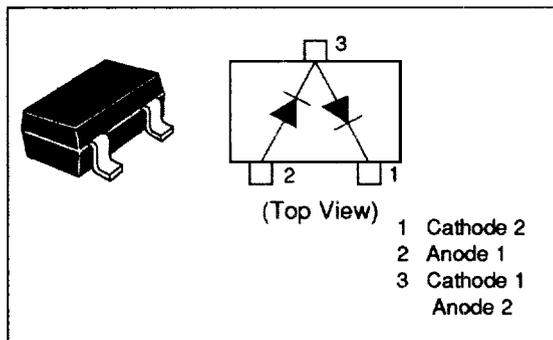
Features

- Low reverse current.
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HSM124S | A 1 | MPAK |

Pin Arrangement



Absolute Maximum Ratings ** (Ta = 25°C)

| Item | Symbol | Value | Unit |
|---|-------------|-------------|------|
| Reverse voltage | V_R | 80 | V |
| Peak reverse voltage | V_{RM} | 85 | V |
| Peak forward current | I_{FM} | 300 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^* | 4 | A |
| Average forward current | I_o | 100 | mA |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

* Within 1μs forward surge current.

** Per one device

Electrical Characteristics *(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-----------------------|----------|-----|-----|------|------|---|
| Forward voltage | V_{F1} | — | — | 1.0 | V | $I_F = 10 \text{ mA}$ |
| | V_{F2} | — | — | 1.0 | | $I_F = 50 \text{ mA}$ |
| | V_{F3} | — | — | 1.2 | | $I_F = 100 \text{ mA}$ |
| Reverse current | I_R | — | — | 0.01 | μA | $V_R = 80 \text{ V}$ |
| Capacitance | C | — | — | 4.0 | pF | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ |
| Reverse recovery time | t_{rr} | — | — | 100 | ns | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$ |

* Per one device

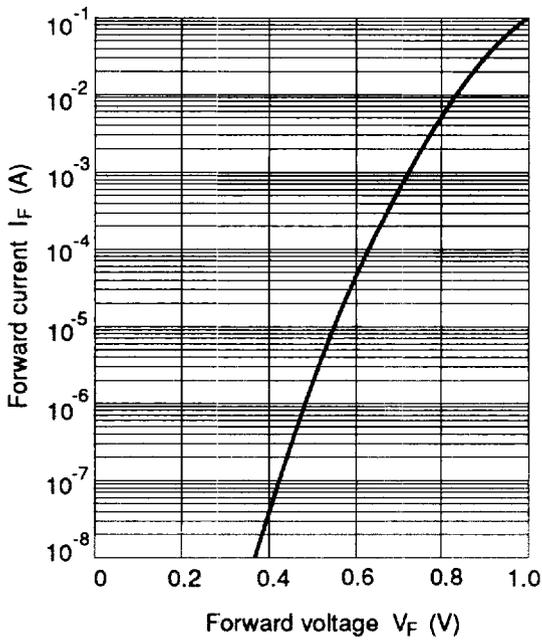


Fig.1 Forward current Vs. Forward voltage

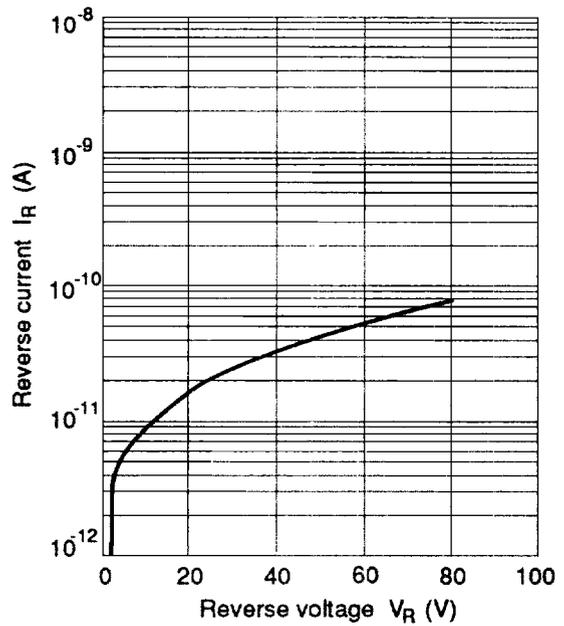


Fig.2 Reverse current Vs. Reverse voltage

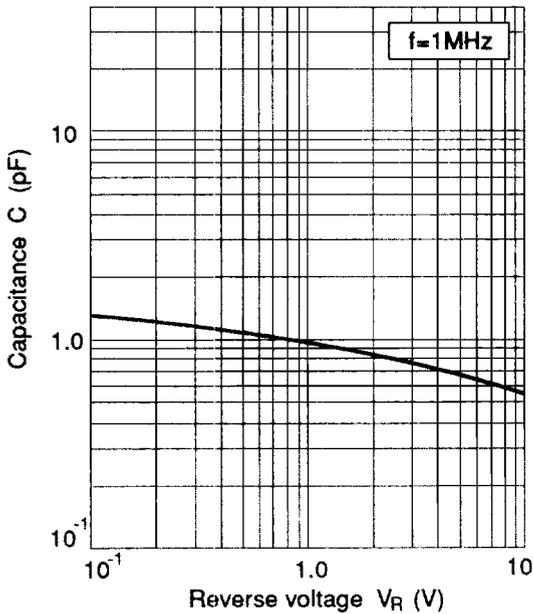


Fig.3 Capacitance Vs. Reverse voltage