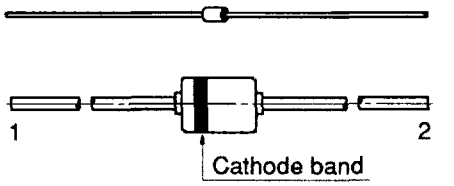
# 1SS119

**Silicon Epitaxial Planar Diode for High Speed Switching**

## Features

- Low capacitance. (C=3.0pF max)
- Short reverse recovery time. ($t_{rr}$ =3.5ns max)
- Small glass package (MHD) enables easy mounting and high reliability.

## Outline




1. Cathode
2. Anode

## Ordering Information

| Type No. | Cathode band | Package Code |
|---|---|---|
| 1SS119 | Light Blue | MHD |

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

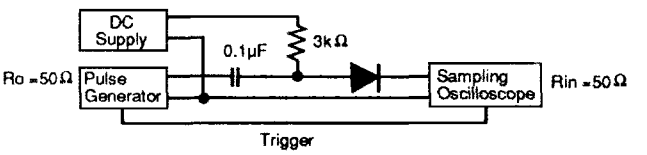
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Peak reverse voltage | $V_{RM}$ | 35 | V |
| Reverse voltage | $V_R$ | 30 | V |
| Peak forward current | $I_{FM}$ | 450 | mA |
| Non-Repetitive peak forward surge current | $I_{FSM}$ * | 1 | A |
| Average forward current | $I_o$ | 150 | mA |
| Power dissipation | $P_d$ | 250 | mW |
| Junction temperature | $T_j$ | 175 | °C |
| Storage temperature | $T_{stg}$ | -65 to +175 | °C |

* Within 1s forward surge current.

## Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | — | — | 0.8 | V | $I_F$ = 10 mA |
| Reverse current | $I_R$ | — | — | 0.1 | μA | $V_R$ = 30 V |
| Capacitance | C | — | — | 3.0 | pF | $V_R$ = 1 V, f = 1 MHz |
| Reverse recovery time | $t_{rr}$ * | — | — | 3.5 | ns | $I_F$=10mA, $V_R$=6V, $R_L$=50Ω |

* Reverse recovery time test circuit



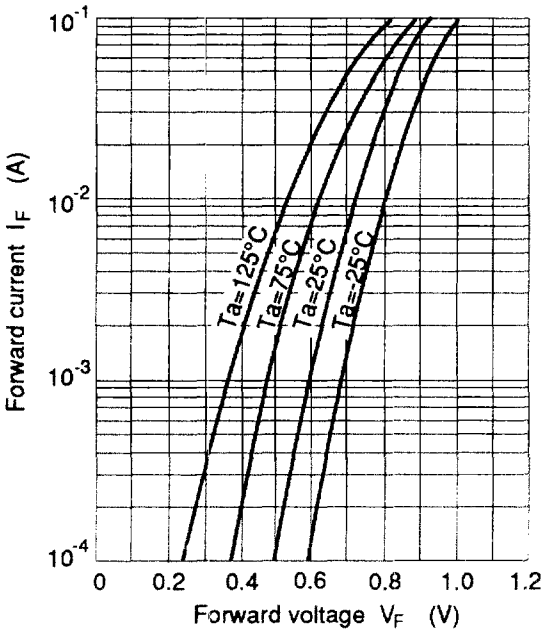



**Fig.1 Forward current Vs. Forward voltage**

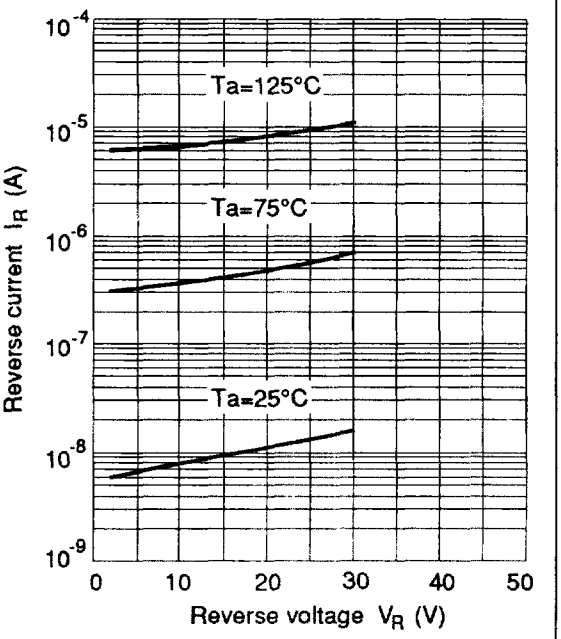



**Fig.2 Reverse current Vs. Reverse voltage**

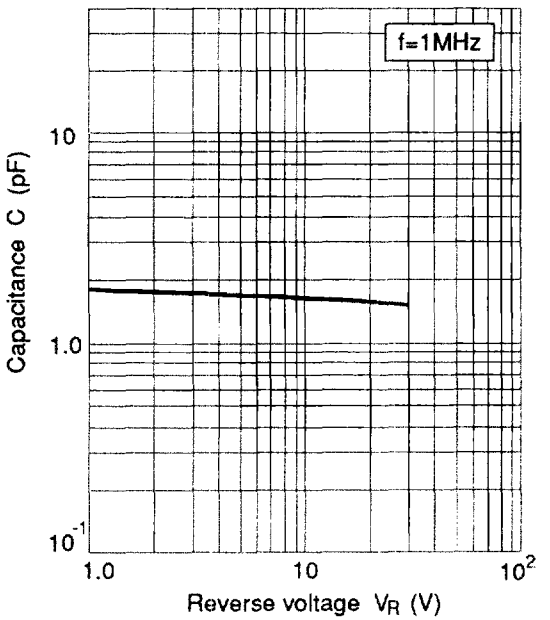



**Fig.3 Capacitance Vs. Reverse voltage**