

# HSS104

## Silicon Epitaxial Planar Diode for High Speed Switching

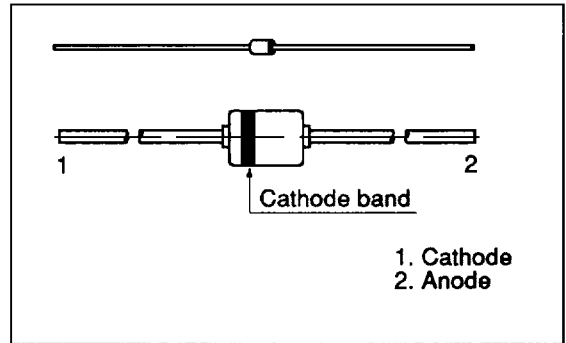
### Features

- Short reverse recovery time and forward recovery time.
- Suitable for 5mm pitch high speed automatic insertion.
- Small glass package (MHD) enables easy mounting and high reliability.

### Ordering Information

| Type No. | Cathode band | Package Code |
|----------|--------------|--------------|
| HSS104   | Blue         | MHD          |

### Outline



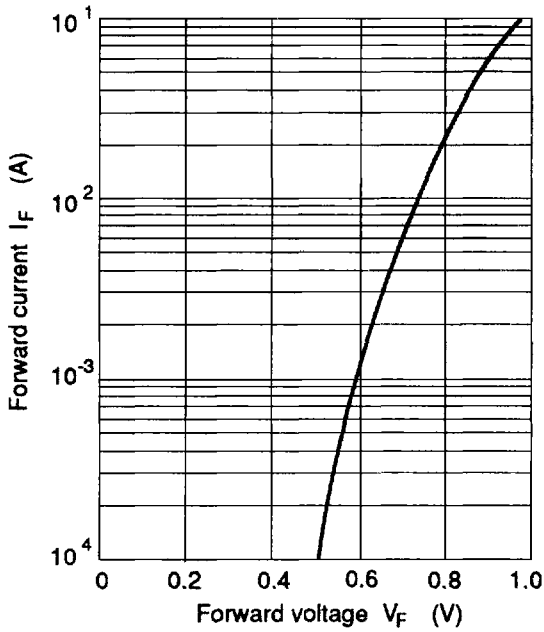
### Absolute Maximum Ratings (Ta = 25°C)

| Item                                      | Symbol      | Value       | Unit |
|---|-------------|-------------|------|
| Peak reverse voltage                      | $V_{RM}$    | 40          | V    |
| Reverse voltage                           | $V_R$       | 35          | V    |
| Peak forward current                      | $I_{FM}$    | 300         | mA   |
| Non Repetitive peak forward surge current | $I_{FSM}^*$ | 0.4         | A    |
| Average forward current                   | $I_o$       | 110         | mA   |
| Power dissipation                         | $P_d$       | 300         | mW   |
| Junction temperature                      | $T_J$       | 175         | °C   |
| Storage temperature                       | $T_{stg}$   | -65 to +175 | °C   |

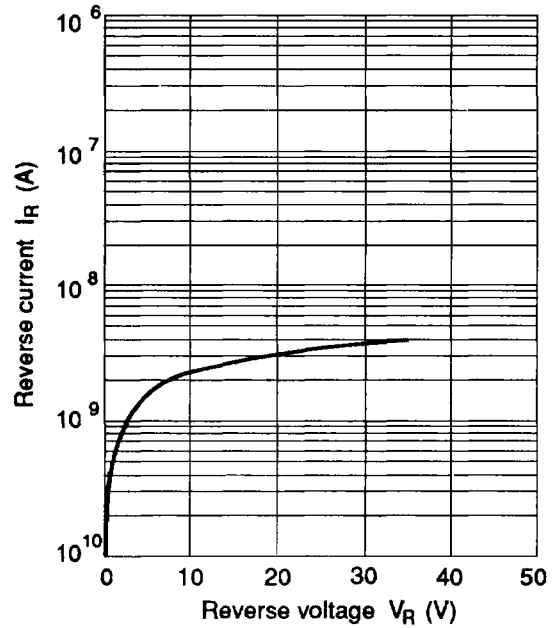
\* Within 1s forward surge current

### Electrical Characteristics (Ta = 25°C)

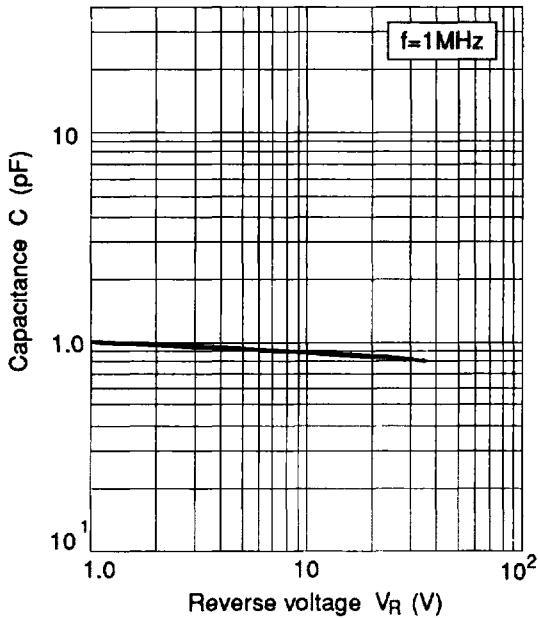
| Item                  | Symbol   | Min | Typ | Max | Unit          | Test Condition  |
|-----------------------|----------|-----|-----|-----|---------------|---|
| Forward voltage       | $V_F$    | —   | —   | 1.2 | V             | $I_F = 100 \text{ mA}$                                    |
| Reverse current       | $I_R$    | —   | —   | 0.5 | $\mu\text{A}$ | $V_R = 35 \text{ V}$                                      |
| Capacitance           | $C$      | —   | —   | 3.0 | pF            | $V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$                  |
| Reverse recovery time | $t_{rr}$ | —   | —   | 3.0 | ns            | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$ |



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



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



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