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# 1SS108

Silicon Schottky Barrier Diode for Various Detector,  
High Speed Switching

# HITACHI

ADE-208-154A (Z)  
Rev. 1

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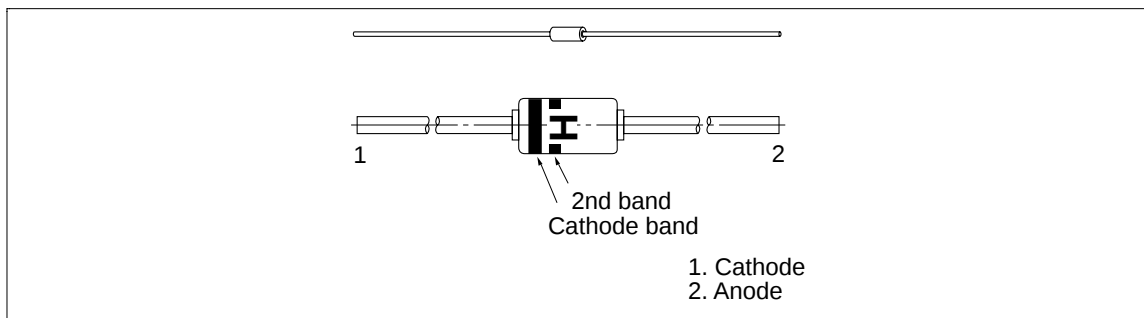
## Features

- Detection efficiency is very good.
- Small temperature coefficient.
- High reliability with glass seal.

## Ordering Information

| Type No. | Cathode | 2nd band | Mark | Package Code |
|----------|---------|----------|------|--------------|
| 1SS108   | White   | Black    | H    | DO-35        |

## Outline



# 1SS108

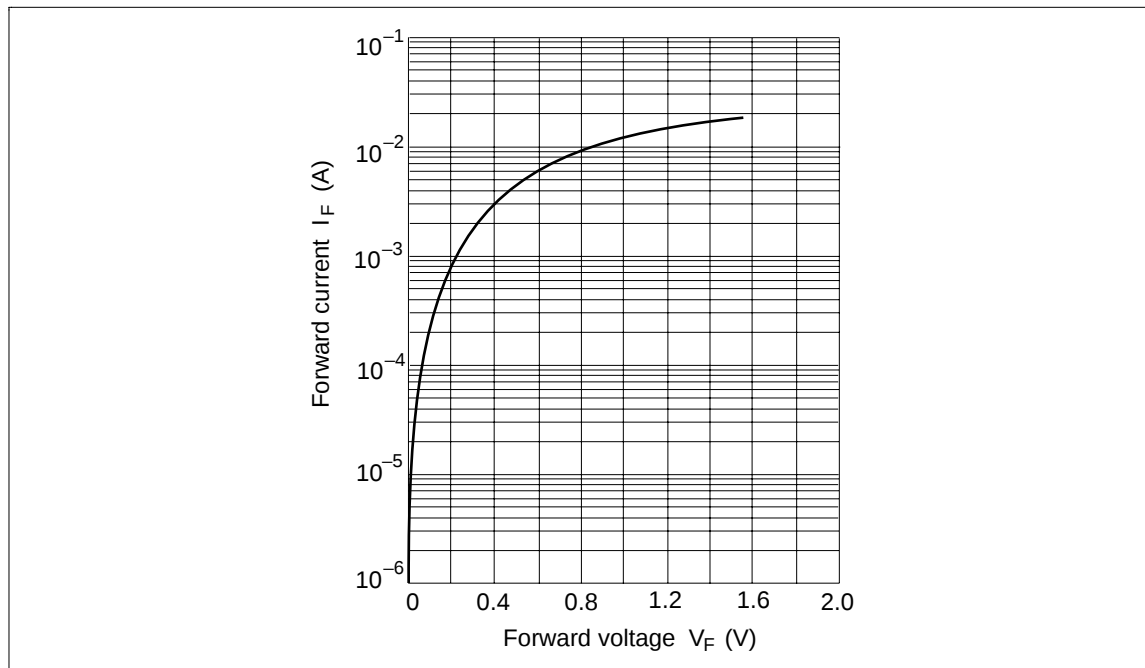
## Absolute Maximum Ratings (Ta = 25°C)

| Item                      | Symbol    | Value       | Unit |
|---------------------------|-----------|-------------|------|
| Reverse voltage           | $V_R$     | 30          | V    |
| Average rectified current | $I_O$     | 15          | mA   |
| Junction temperature      | $T_J$     | 125         | °C   |
| Storage temperature       | $T_{stg}$ | -55 to +125 | °C   |

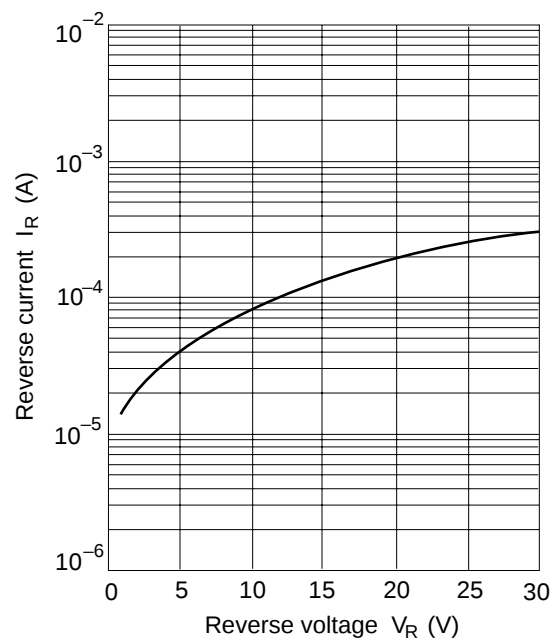
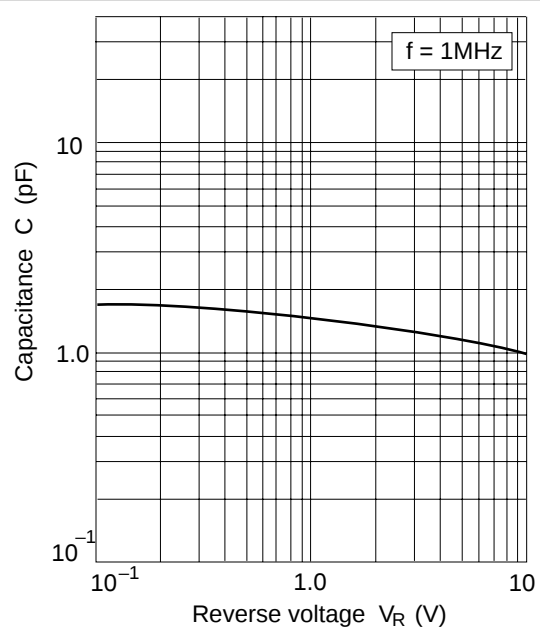
## Electrical Characteristics (Ta = 25°C)

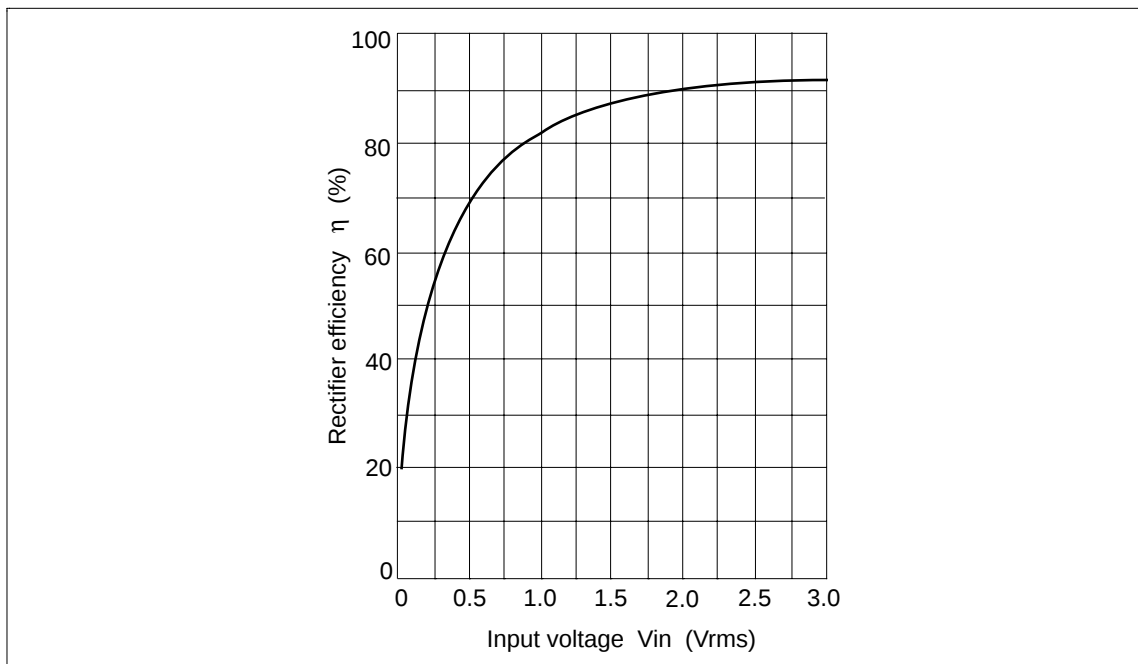
| Item                 | Symbol | Min | Typ | Max | Unit    | Test Condition                                             |
|----------------------|--------|-----|-----|-----|---------|------------------------------------------------------------|
| Forward current      | $I_F$  | 3.0 | —   | —   | mA      | $V_F = 1V$                                                 |
| Reverse current      | $I_R$  | —   | —   | 100 | $\mu A$ | $V_R = 10V$                                                |
| Capacitance          | $C$    | —   | —   | 3.0 | pF      | $V_R = 1V, f = 1MHz$                                       |
| Rectifier efficiency | $\eta$ | 70  | —   | —   | %       | $V_{in} = 2V_{rms}, f = 40MHz, R_L = 5k\Omega, C_L = 20pF$ |
| ESD-Capability       | —      | 70  | —   | —   | V       | *C = 200pF, Both forward and reverse direction 1 pulse.    |

Note: Failure criterion;  $I_R \geq 200\mu A$  at  $V_R = 10V$



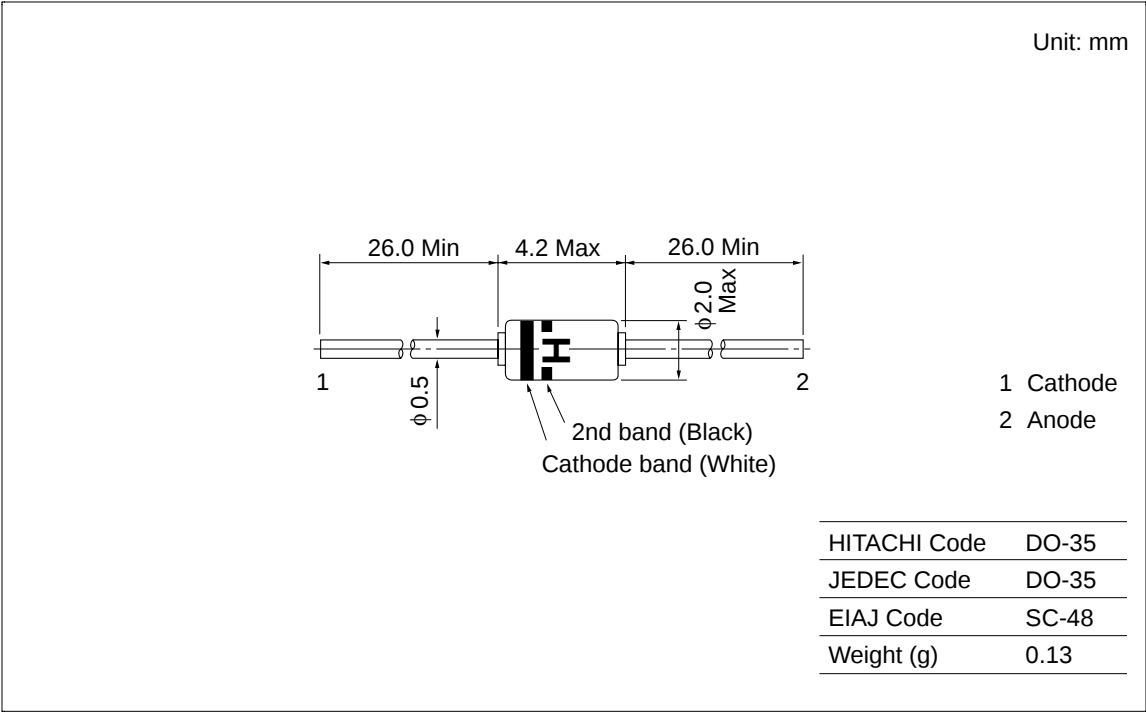
**Fig.1 Forward current Vs. Forward voltage**

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



**Fig.4 Rectifier efficiency Vs. Input voltage**

Package Dimensions



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[www.DatasheetCatalog.com](http://www.DatasheetCatalog.com)

Datasheets for electronic components.