
1SS108

**Silicon Schottky Barrier Diode for Various Detector,
High Speed Switching**

HITACHI

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

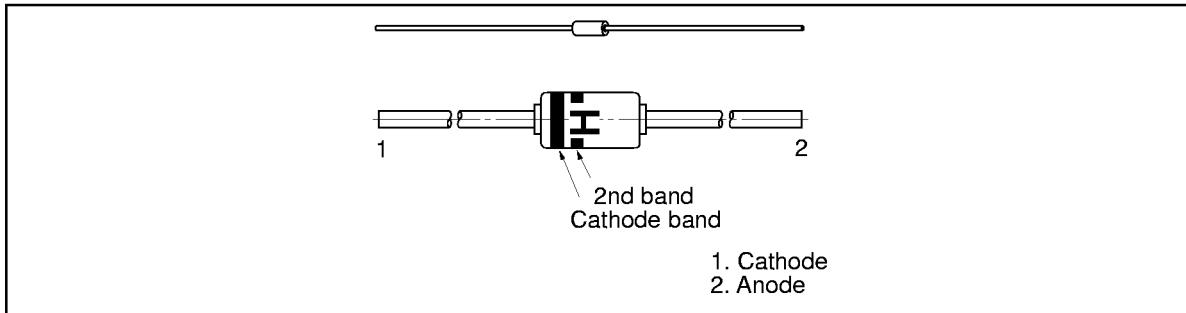
Features

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

Item	Symbol	Value	Unit
Reverse voltage	V_R	30	V
Average rectified current	I_o	15	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

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

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

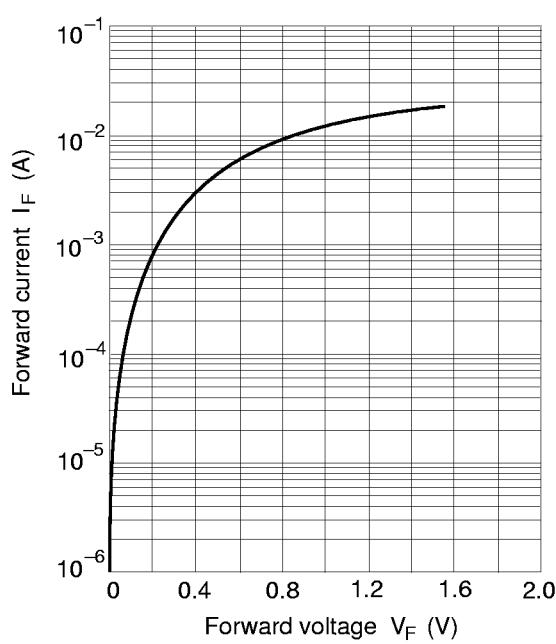


Fig.1 Forward current Vs. Forward voltage

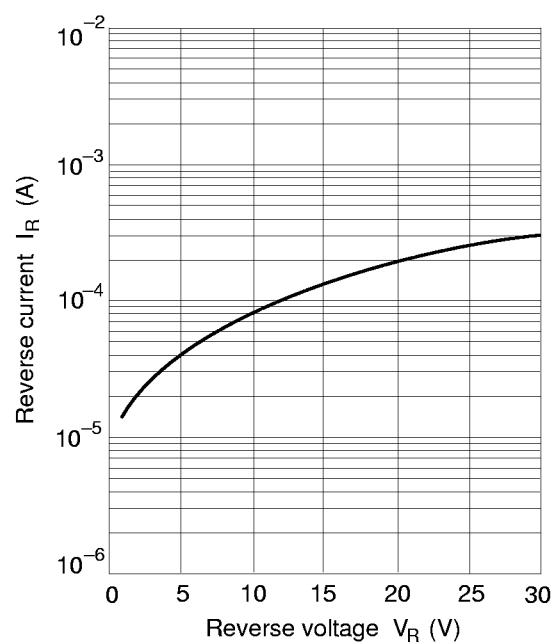


Fig.2 Reverse current Vs. Reverse voltage

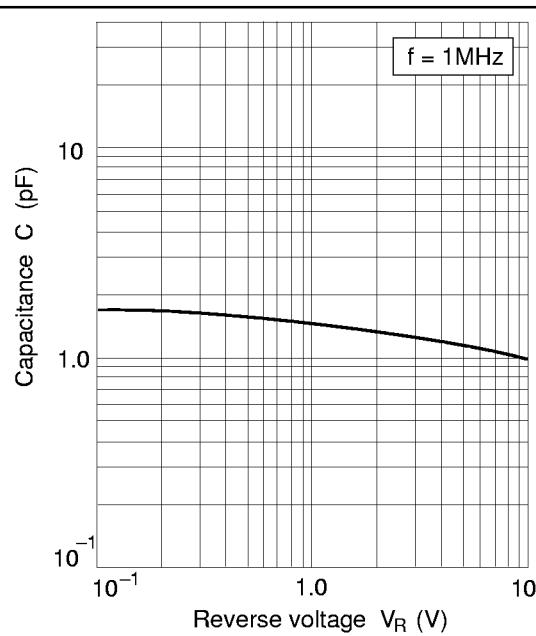


Fig.3 Capacitance Vs. Reverse voltage

1SS108

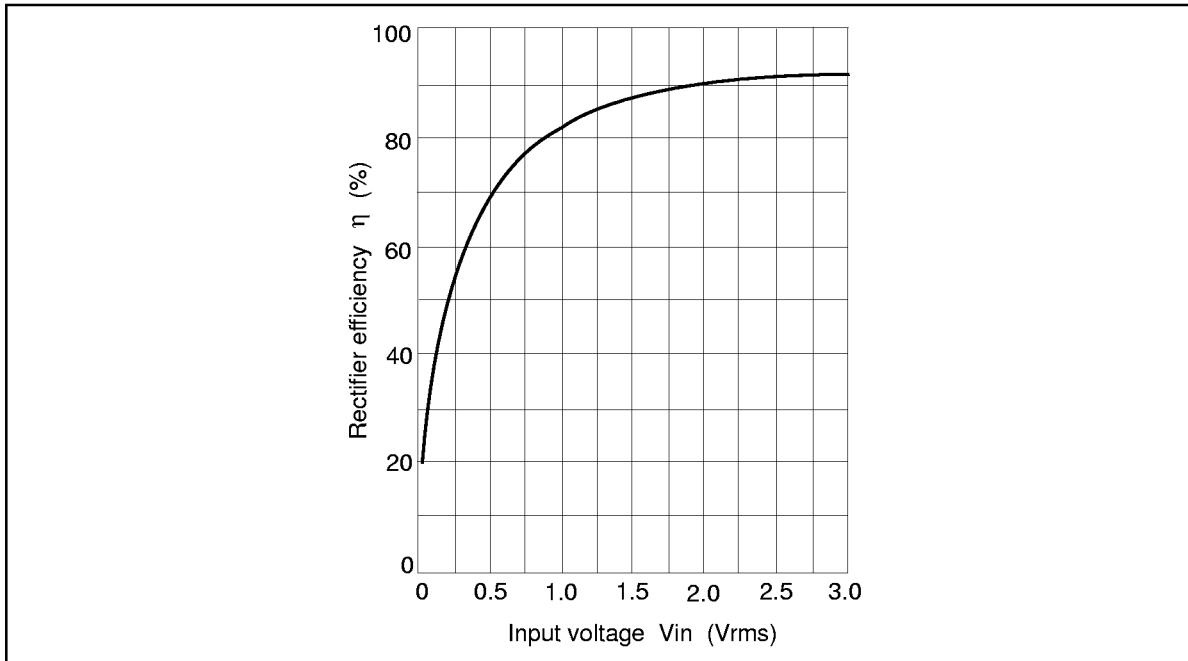


Fig.4 Rectifier efficiency Vs. Input voltage

Package Dimensions