
1SS108

Silicon Schottky Barrier Diode for Various Detector,
High Speed Switching

HITACHI

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

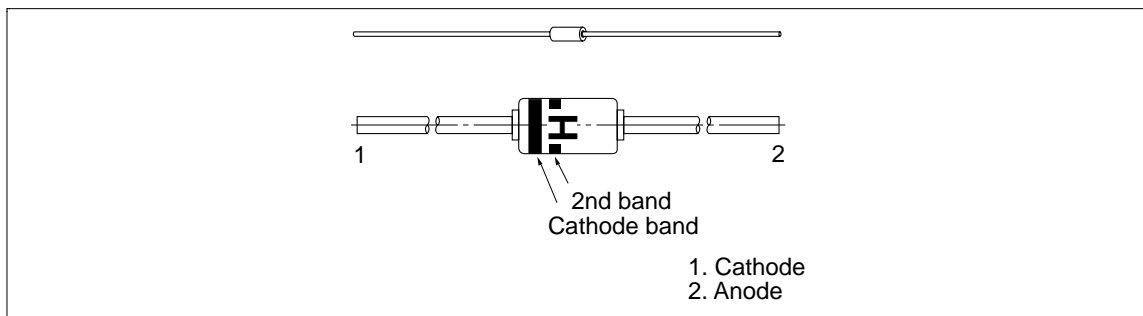
Features

- 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 (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	μA	$V_R = 10V$
Capacitance	C	—	—	3.0	pF	$V_R = 1V, f = 1MHz$
Rectifier efficiency	η	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 $V_R = 10V$

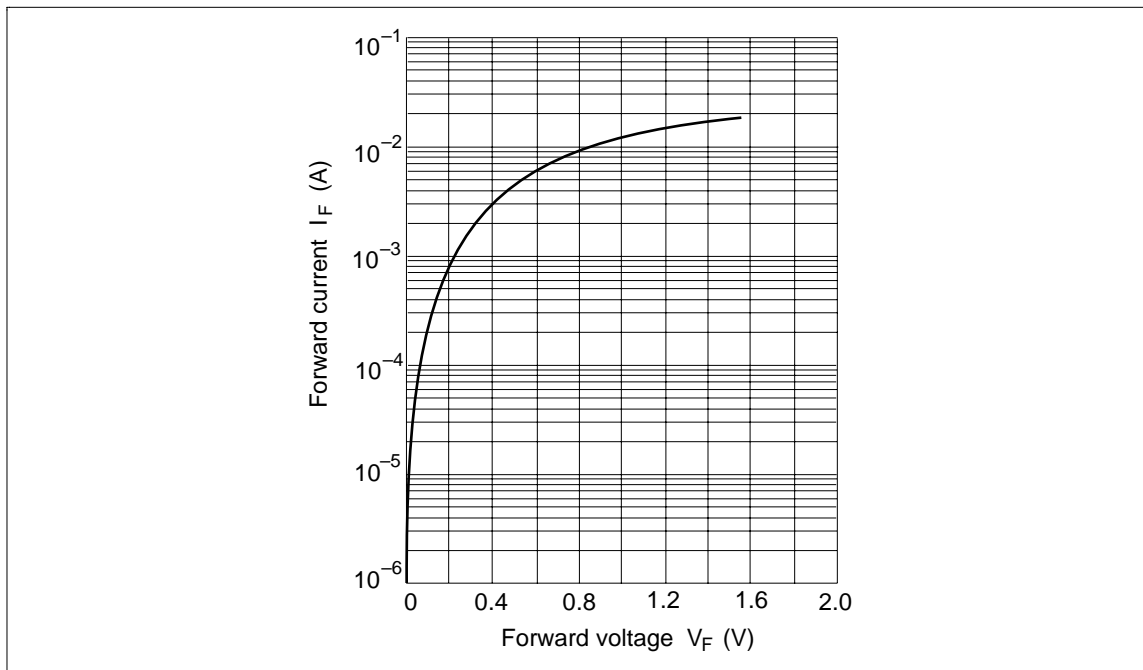


Fig.1 Forward current Vs. Forward voltage

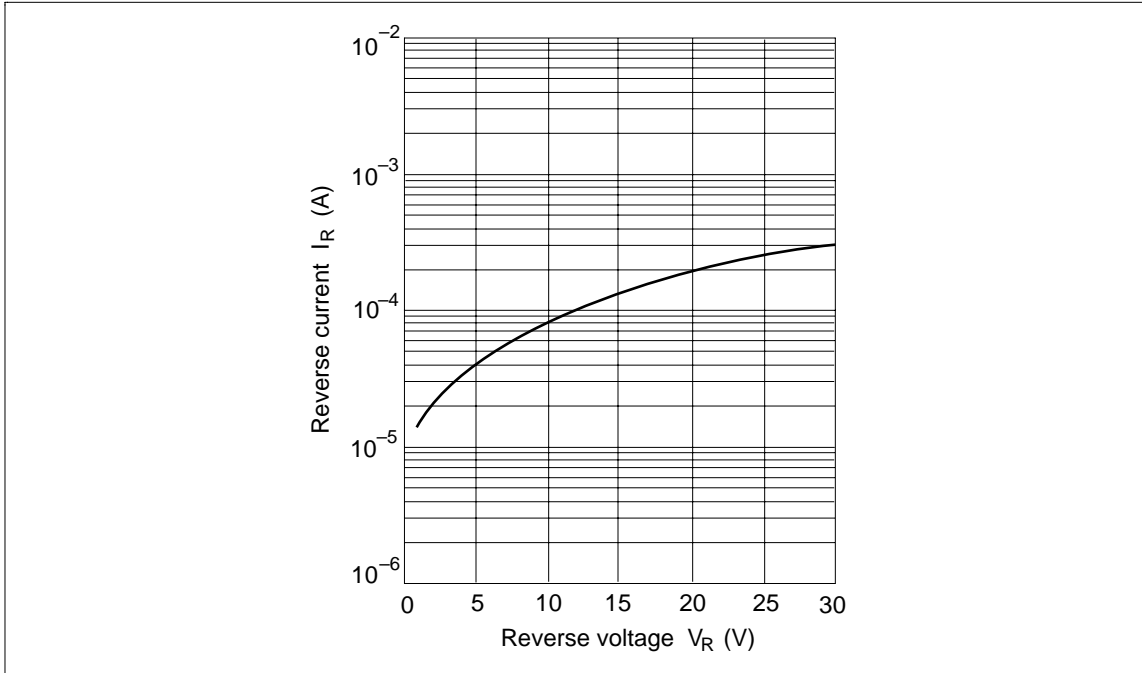


Fig.2 Reverse current Vs. Reverse voltage

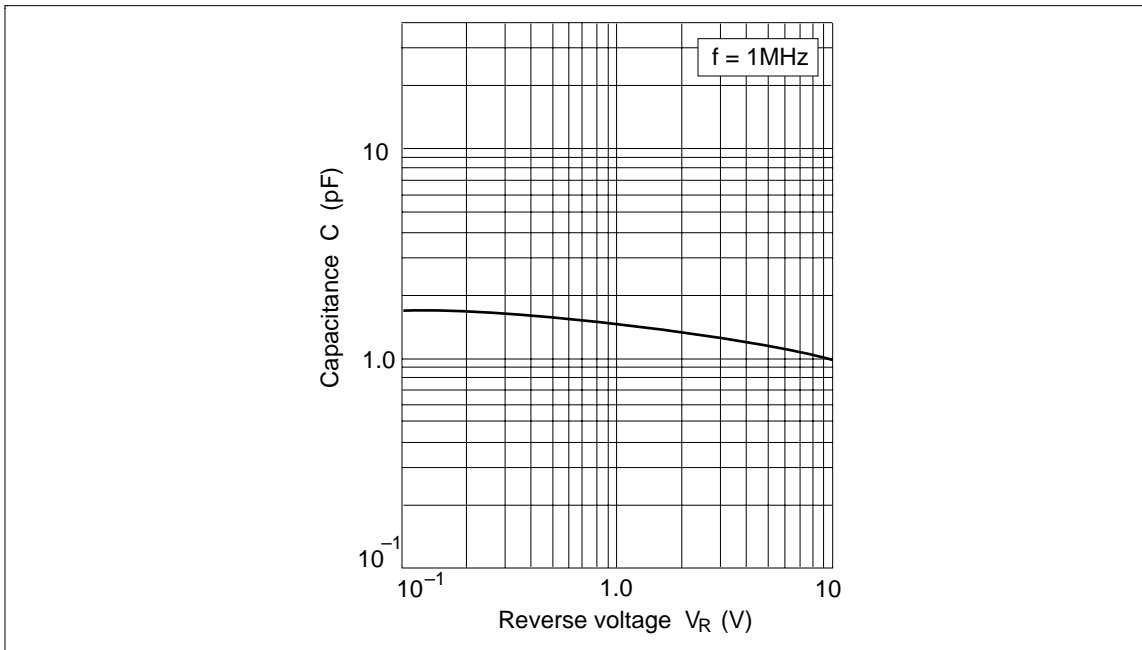


Fig.3 Capacitance Vs. Reverse voltage

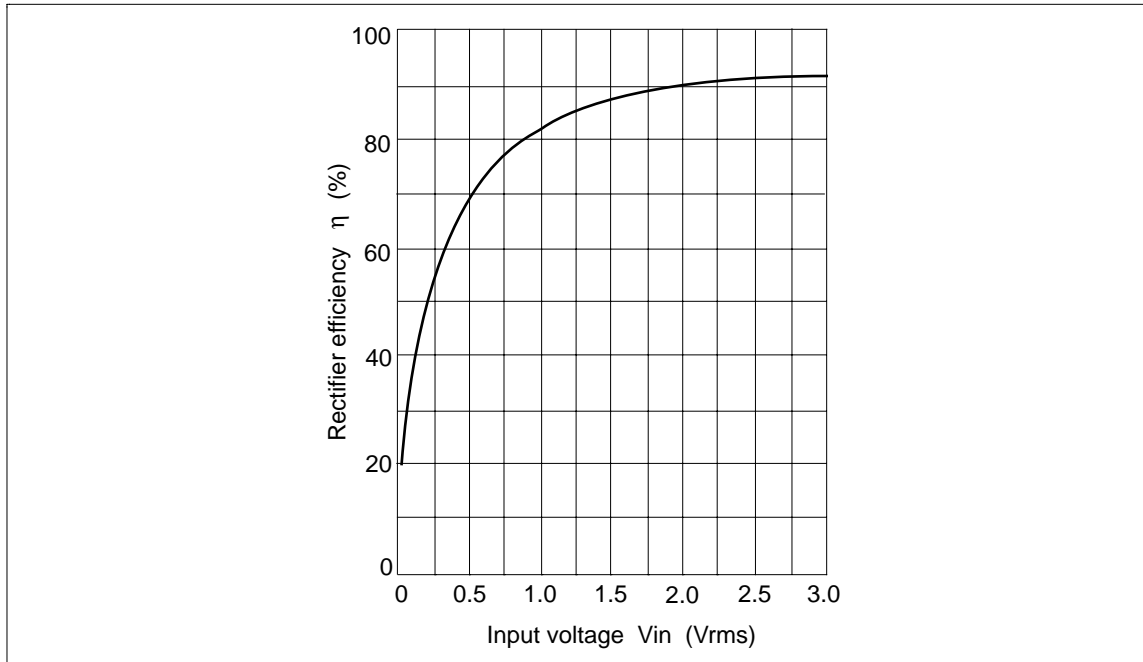
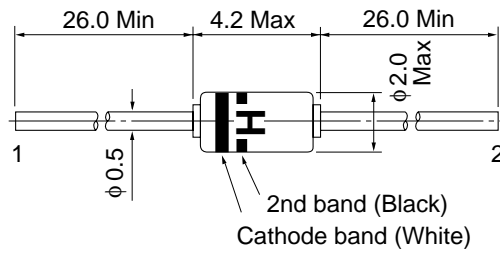


Fig.4 Rectifier efficiency Vs. Input voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

HITACHI Code	DO-35
JEDEC Code	DO-35
EIAJ Code	SC-48
Weight (g)	0.13