
1SS106

Silicon Schottky Barrier Diode for Various Detector,
High Speed Switching

HITACHI

ADE-208-153A (Z)

Rev. 1
Oct. 1998

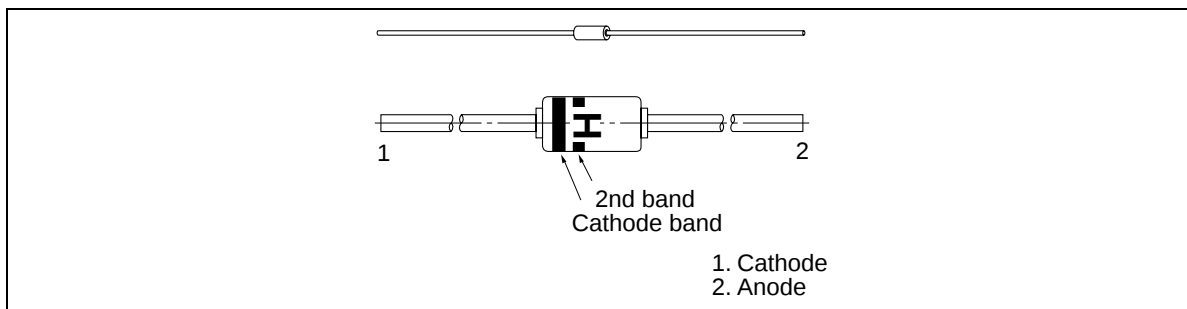
Features

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

Ordering Information

Type No.	Cathode	2nd band	Mark	Package Code
1SS106	White	White	H	DO-35

Outline



1SS106

Absolute Maximum Ratings

(T_a = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V _R	10	V
Average rectified current	I _O	30	mA
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	–55 to +125	°C

Electrical Characteristics

(T_a = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward current	I _F	4.5	—	—	mA	V _F = 1V
Reverse current	I _R	—	—	70	μA	V _R = 6V
Capacitance	C	—	—	1.5	pF	V _R = 1V, f = 1MHz
Rectifier efficiency	η	70	—	—	%	V _{in} = 2V _{rms} , f = 40MHz, R _L = 5kΩ, C _L = 20pF
ESD-Capability ^{*1}	—	100	—	—	V	C = 200pF, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion; I_R ≥ 140μA at V_R = 6V

Main Characteristic

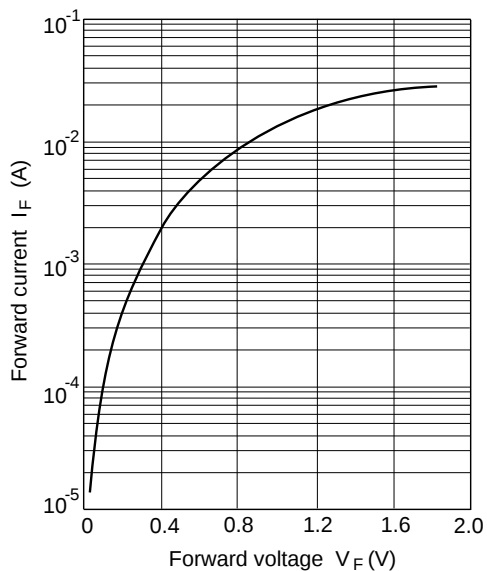


Fig.1 Forward current Vs. Forward voltage

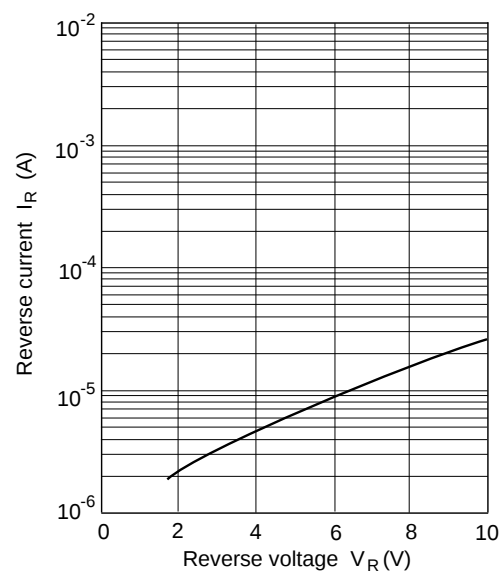


Fig.2 Reverse current Vs. Reverse voltage

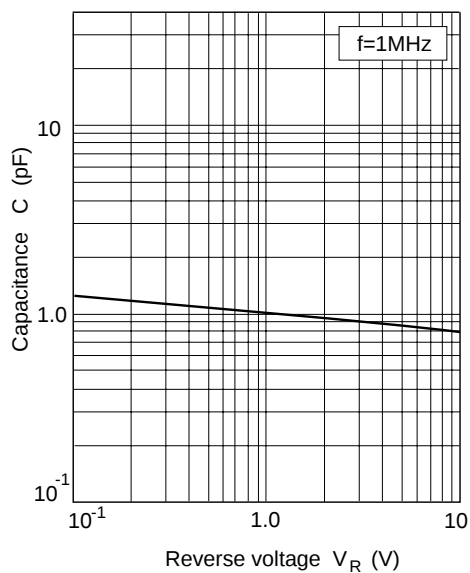
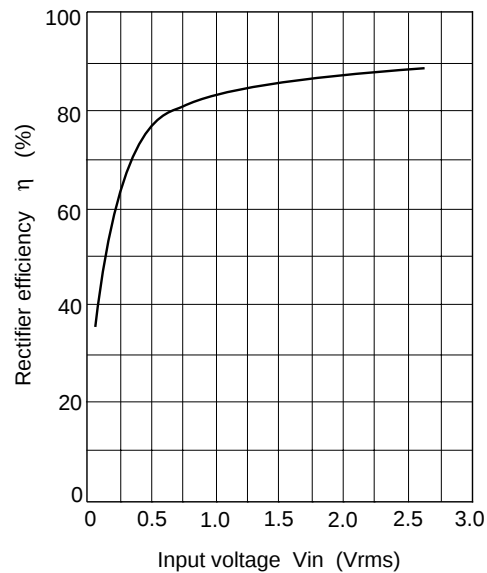
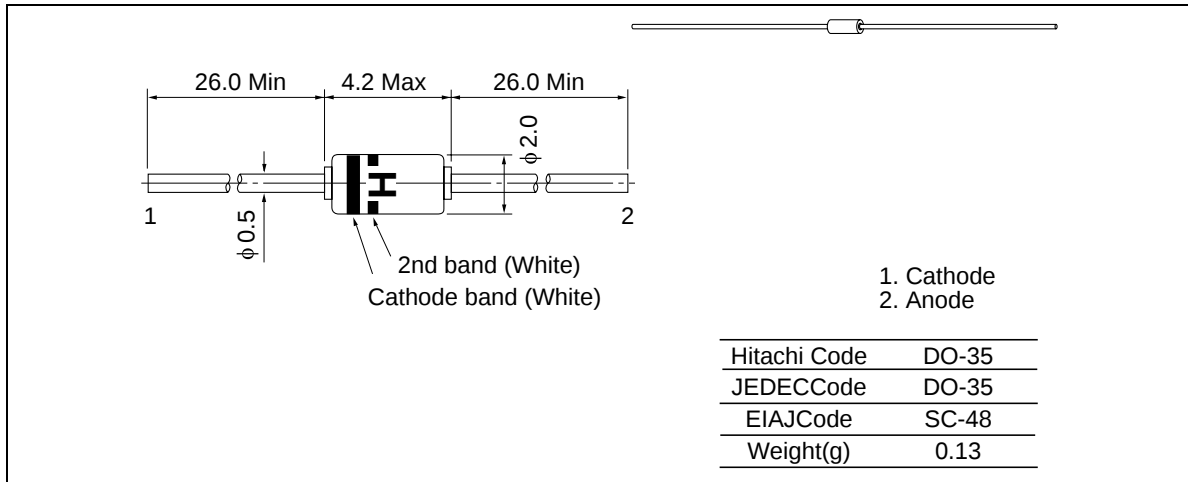


Fig.3 Capacitance Vs. Reverse voltage

Fig.4 Rectifier efficiency Vs. Input voltage V_{in}

1SS106

Package Dimensions



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