

1SS86

Silicon Schottky Barrier Diode for UHF TV Tuner Mixer

HITACHI

Rev. 1
Nov 1994

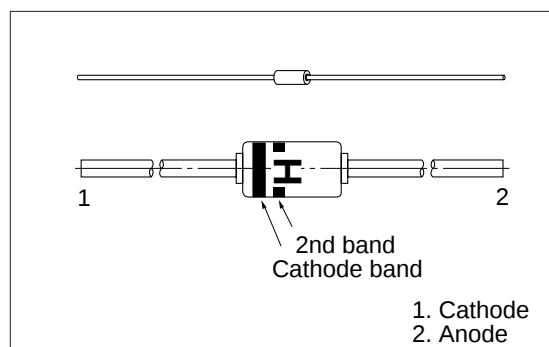
Features

- Low capacitance. ($C=0.85\text{pF}$ max)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode	2nd band	Mark	Package Code
1SS86	White	White	H	DO-35

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Reverse voltage	V_R	3	V
Average forward current	I_o	30	mA
Power dissipation	P_d	150	mW
Junction temperature	T_j	100	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +100	$^\circ\text{C}$

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward current	I_F	8	—	—	mA	$V_F = 0.5\text{ V}$
Reverse voltage	V_R	3	—	—	V	$I_R = 1\text{ mA}$
Reverse current	I_R	—	—	50	μA	$V_R = 0.5\text{ V}$
Capacitance	C	—	—	0.85	pF	$V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$
ESD-Capability	—	30	—	—	V	* $C=200\text{pF}$, Both forward and reverse direction 1 pulse.

* Failure criterion ; $I_R \geq 50\mu\text{A}$ at $V_R = 0.5\text{V}$

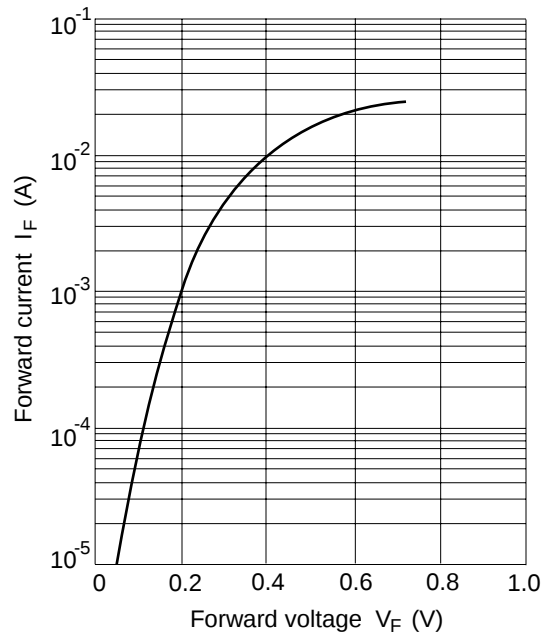


Fig.1 Forward current Vs. Forward voltage

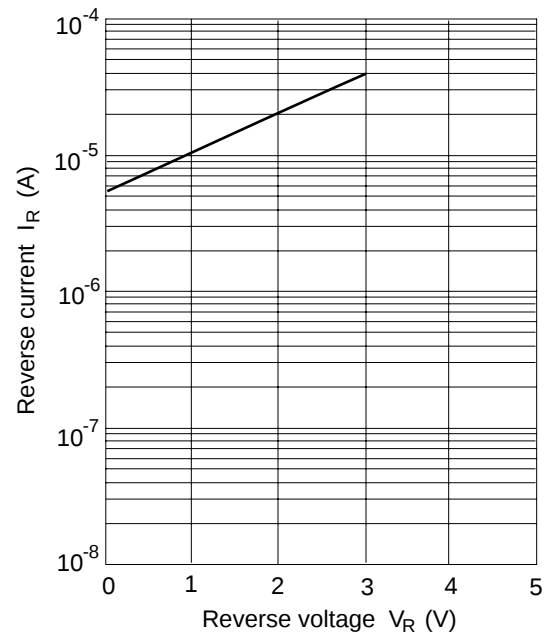


Fig.2 Reverse current Vs. Reverse voltage

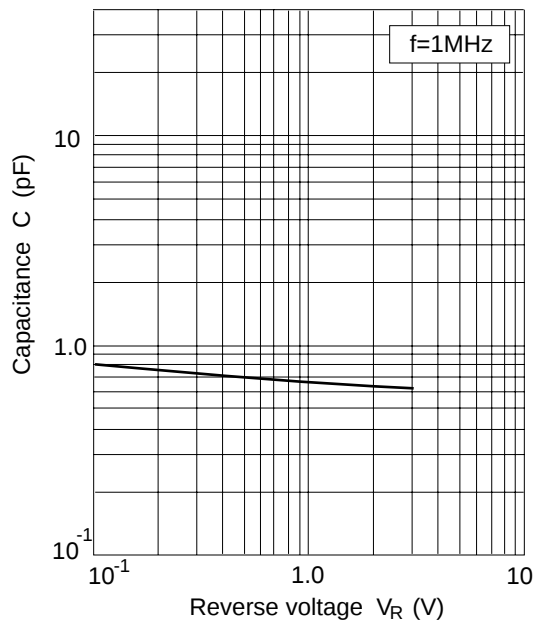
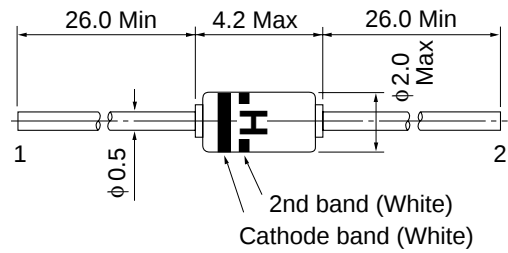


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

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