
1SS88

Silicon Schottky Barrier Diode for CATV Balanced Mixer

HITACHI

ADE-208-187A (Z)

Rev. 1
Oct. 2000

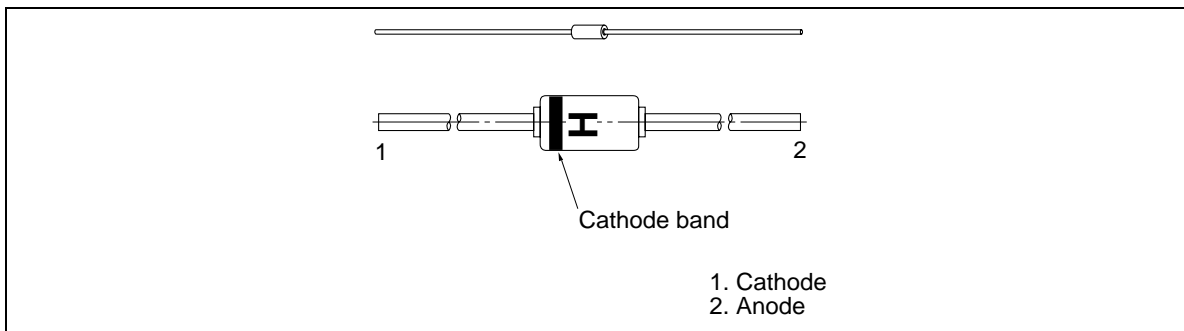
Features

- Low capacitance. ($C = 0.97$ pF max)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1SS88	White	H	DO-35

Outline



1SS88

Absolute Maximum Ratings

(T_a = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V _R	10	V
Peak forward current	I _{FM}	35	mA
Average forward current	I _O	15	mA
Power dissipation	Pd	150	mW
Junction temperature	T _j	100	°C
Storage temperature	T _{stg}	-55 to +100	°C

Electrical Characteristics

(T_a = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V _{F1}	365	—	430	mV	I _F = 1 mA
	V _{F2}	520	—	600		I _F = 10 mA
Reverse current	I _{R1}	—	—	0.2	μA	V _R = 2 V
	I _{R2}	—	—	10		V _R = 10 V
Capacitance	C	—	—	0.97	pF	V _R = 0 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.1	pF	V _R = 0 V, f = 1 MHz
Forward voltage deviation	ΔV _{F1}	—	—	10	mV	I _F = 2.5 mA
	ΔV _{F2}	—	—	10		I _F = 10 mA
ESD-Capability *1	—	30	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion ; I_R > 50 μA at V_R = 10 V
2. Each group shall unify a multiple of 4 diodes

Main Characteristic

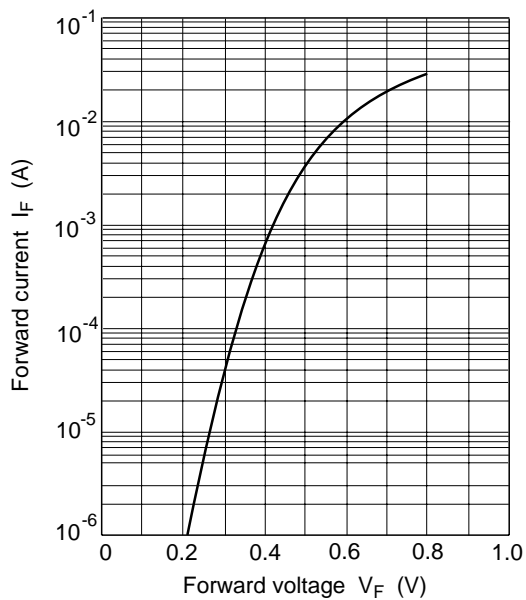


Fig.1 Forward current Vs. Forward voltage

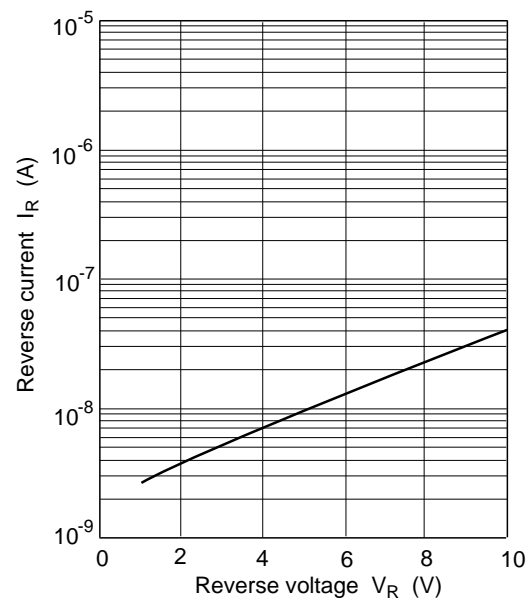


Fig.2 Reverse current Vs. Reverse voltage

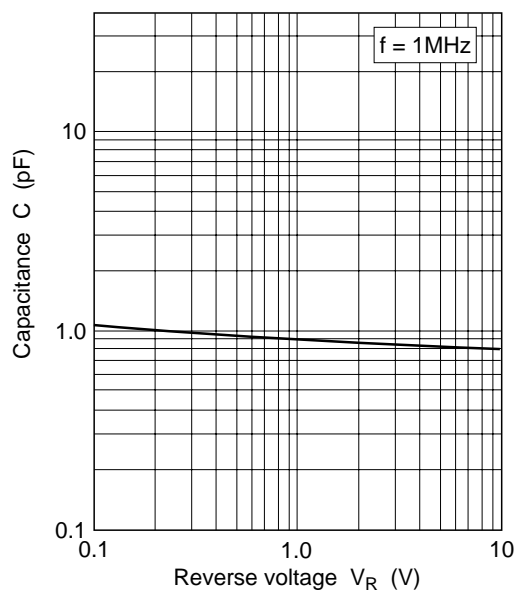
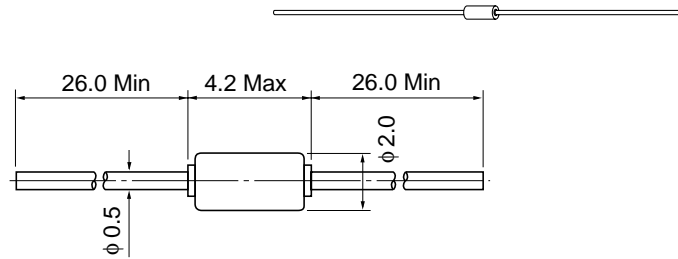


Fig.3 Capacitance Vs. Reverse voltage

1SS88

Package Dimensions

Unit: mm



Hitachi Code	DO-35
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.13 g

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