To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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   Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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1SS88

Silicon Schottky Barrier Diode for CATV Balanced Mixer

ADE-208-187A (Z)

Rev. 1
Oct. 2000

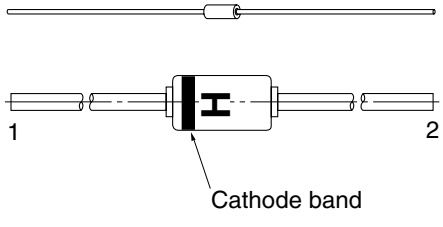
Features

- 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

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 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	Tj	100	°C
Storage temperature	Tstg	–55 to +100	°C

Electrical Characteristics

(Ta = 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	ΔV_{F1}	—	—	10	mV	I_F = 2.5 mA
deviation	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

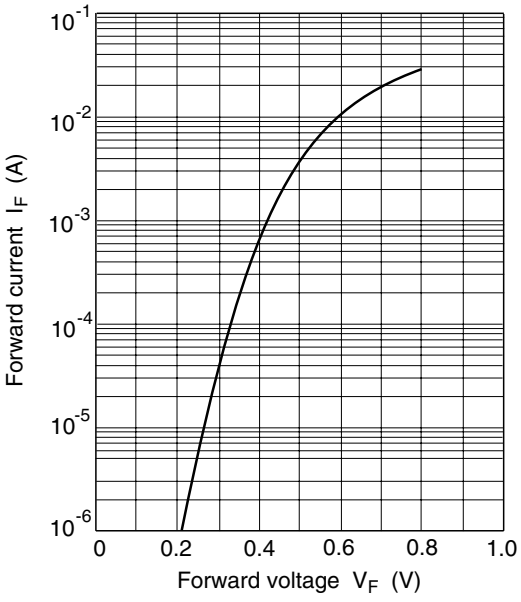


Fig.1 Forward current Vs. Forward voltage

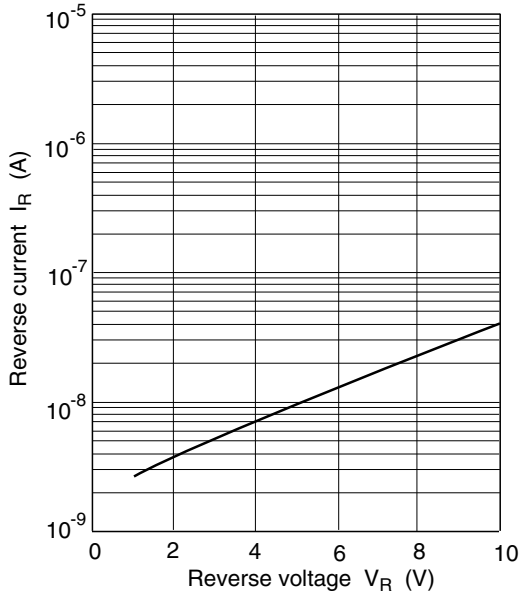


Fig.2 Reverse current Vs. Reverse voltage

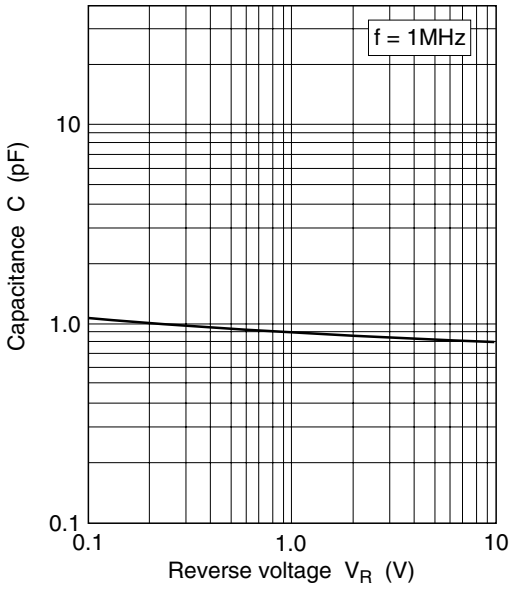
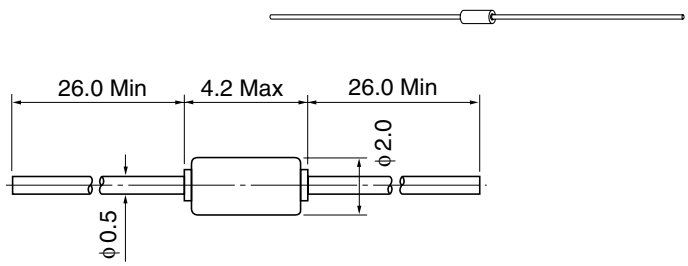


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



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

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