

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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# 1SS86

Silicon Schottky Barrier Diode for UHF TV Tuner Mixer



ADE-208-186B (Z)

Rev. 2  
Oct. 2000

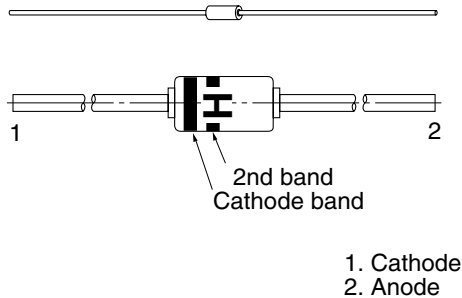
## Features

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

## Ordering Information

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

## Pin Arrangement



**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	3	V
Average forward current	$I_o$	30	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 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	$\mu\text{A}$	$V_R = 0.5 \text{ V}$
Capacitance	C	—	—	0.85	pF	$V_R = 0.5 \text{ V}$ , $f = 1 \text{ MHz}$
ESD-Capability *	—	30	—	—	V	C = 200 pF, R = 0 $\Omega$ , Both forward and reverse direction 1 pulse.

Note: Failure criterion ;  $I_R > 50 \mu\text{A}$  at  $V_R = 0.5 \text{ V}$

## Main Characteristic

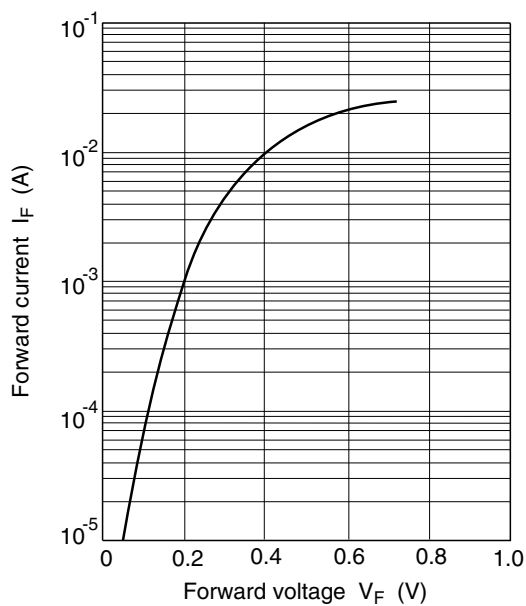


Fig.1 Forward current Vs. Forward voltage

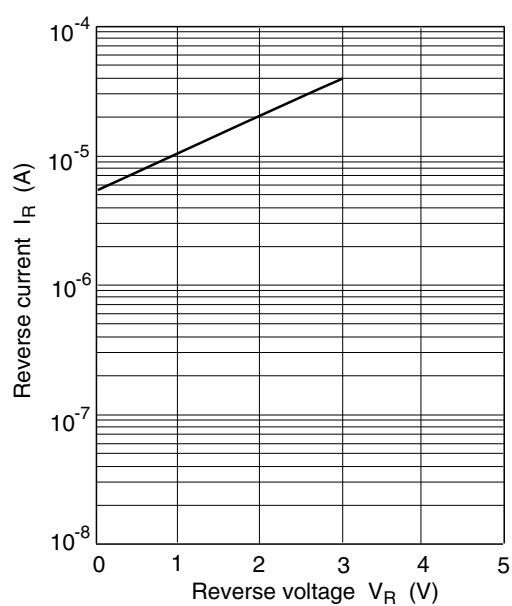


Fig.2 Reverse current Vs. Reverse voltage

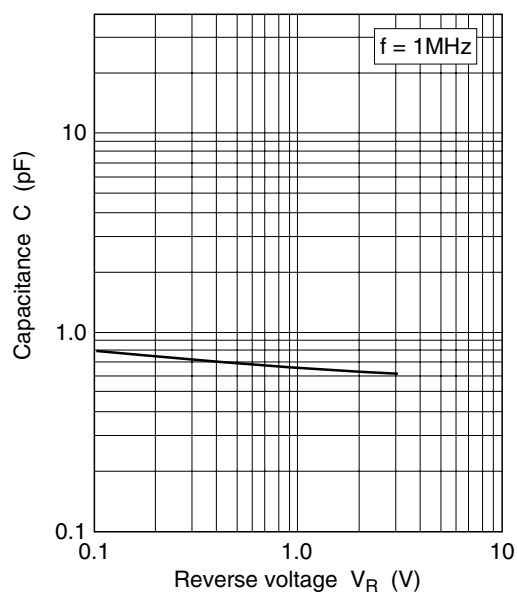
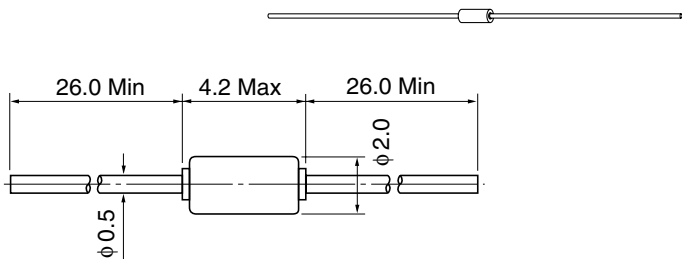


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



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

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