

# 1SS86

## Silicon Schottky Barrier Diode for UHF TV Tuner Mixer

REJ03G0614-0300

(Previous: ADE-208-186B)

Rev.3.00

May 09, 2005

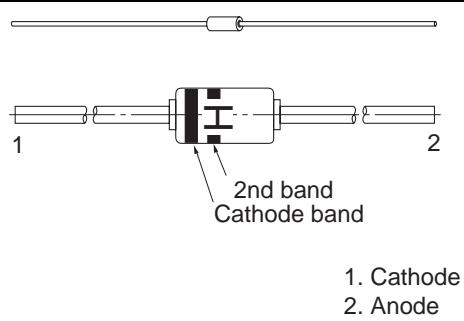
### Features

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

### Ordering Information

Type No.	Cathode band	2nd band	Mark	Package Name	Package Code (Previous Code)
1SS86	White	White	H	DO-35	GRZZ0002ZB-A (DO-35)

### Pin Arrangement



**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	3	V
Average rectified current	I <sub>o</sub>	30	mA
Power dissipation	P <sub>d</sub>	150	mW
Junction temperature	T <sub>j</sub>	100	°C
Storage temperature	T <sub>stg</sub>	-55 to +100	°C

**Electrical Characteristics**

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward current	I <sub>F</sub>	8	—	—	mA	V <sub>F</sub> = 0.5 V
Reverse current	I <sub>R</sub>	—	—	50	μA	V <sub>R</sub> = 0.5 V
Reverse voltage	V <sub>R</sub>	3.0	—	—	V	I <sub>R</sub> = 1 mA
Capacitance	C	—	—	0.85	pF	V <sub>R</sub> = 0.5 V, f = 1 MHz
ESD-Capability *	—	30	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Note: Failure criterion ; I<sub>R</sub> > 50 μA at V<sub>R</sub> = 0.5 V

## Main Characteristic

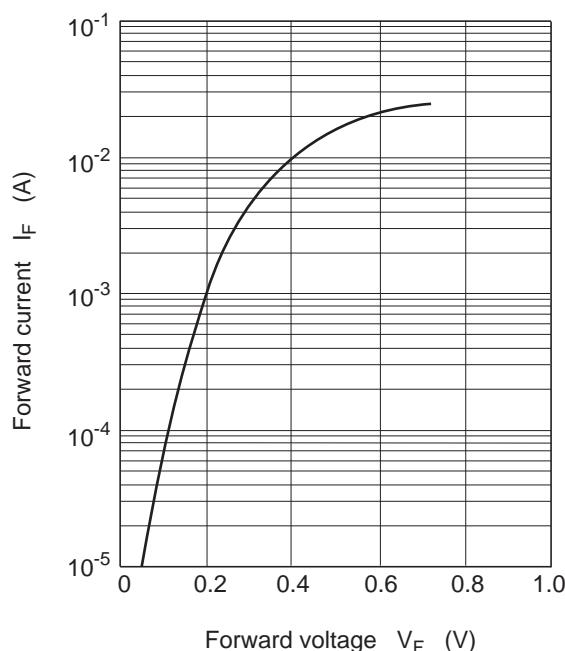


Fig.1 Forward current vs. Forward voltage

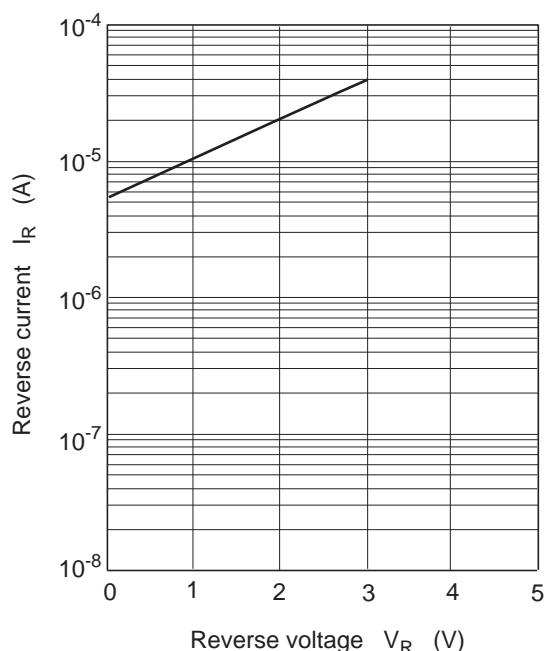


Fig.2 Reverse current vs. Reverse voltage

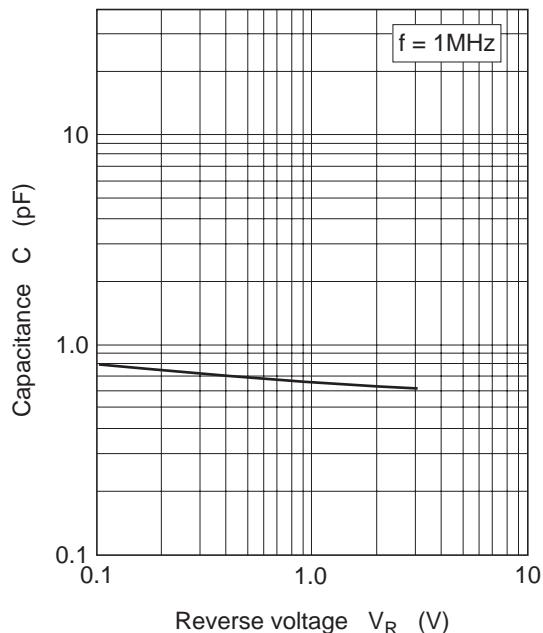
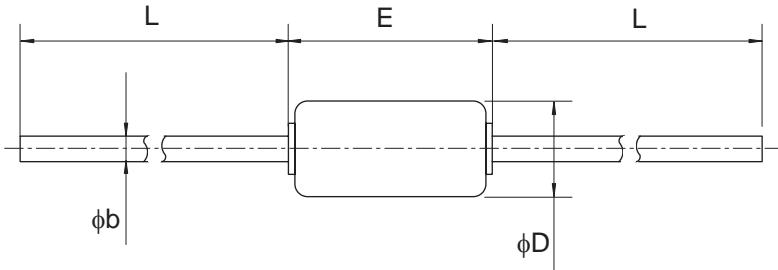


Fig.3 Capacitance vs. Reverse voltage

## Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-40	GRZZ0002ZB-A	DO-35 / DO-35V	0.13g

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
$\phi b$	-	0.5	-
$\phi D$	-	2.0	-
E	-	-	4.2
L	26.0	-	-

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