

# 1SS86

## Silicon Schottky Barrier Diode for UHF TV Tuner Mixer

REJ03G0614-0300  
(Previous: ADE-208-186B)  
Rev.3.00  
May 09, 2005

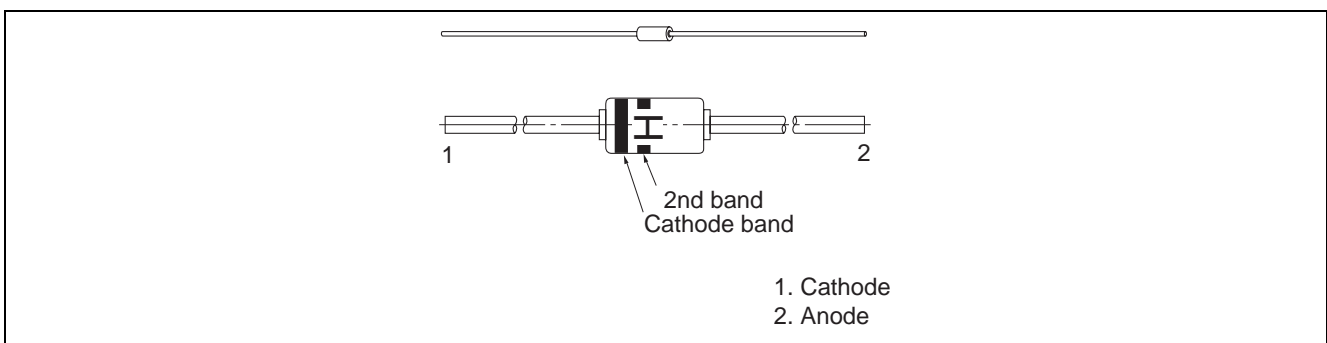
### Features

- Low capacitance. (C = 0.85 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	$V_R$	3	V
Average rectified current	$I_O$	30	mA
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	100	°C
Storage temperature	$T_{stg}$	-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 current	$I_R$	—	—	50	$\mu\text{A}$	$V_R = 0.5\text{ V}$
Reverse voltage	$V_R$	3.0	—	—	V	$I_R = 1\text{ mA}$
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

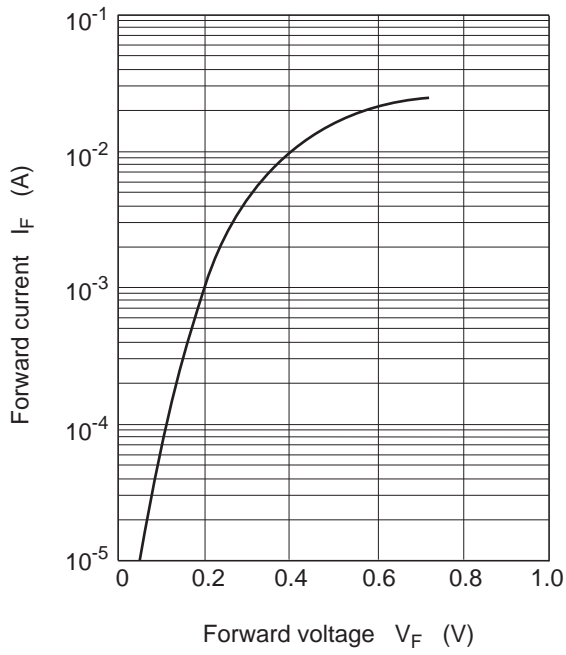


Fig.1 Forward current vs. Forward voltage

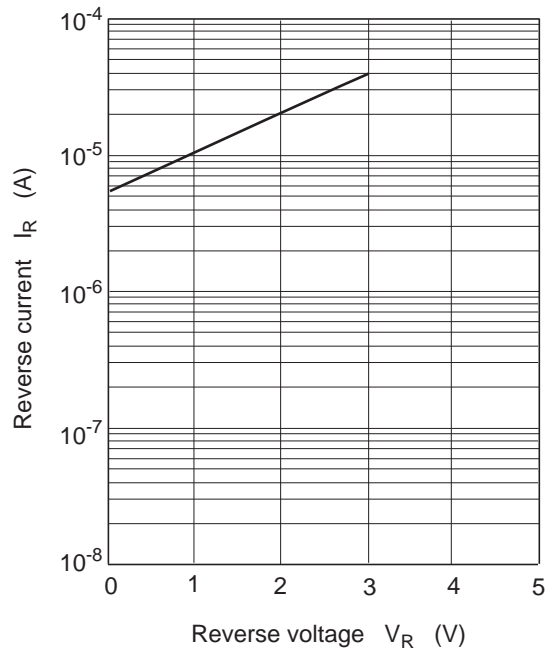


Fig.2 Reverse current vs. Reverse voltage

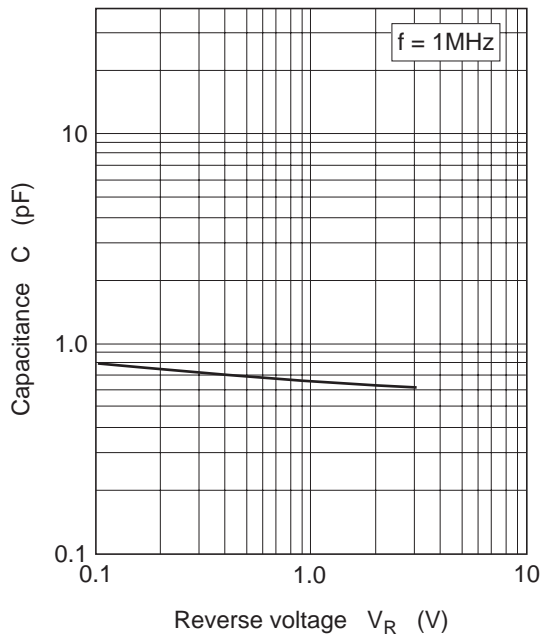


Fig.3 Capacitance vs. Reverse voltage

## Package Dimensions

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

The diagram shows a side view of the package with a central rectangular body of length E and diameter phi D. Two leads extend from the body, each of length L, with a diameter of phi b. The drawing uses standard mechanical notation with dimension lines and break symbols.

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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450 Holger Way, San Jose, CA 95134-1368, U.S.A  
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

#### **Renesas Technology Europe Limited**

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.  
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

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7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong  
Tel: <852> 2265-6688, Fax: <852> 2730-6071

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Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

#### **Renesas Technology (Shanghai) Co., Ltd.**

Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China  
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

#### **Renesas Technology Singapore Pte. Ltd.**

1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632  
Tel: <65> 6213-0200, Fax: <65> 6278-8001