

# 1SS86

## Silicon Schottky Barrier Diode for UHF TV Tuner Mixer

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

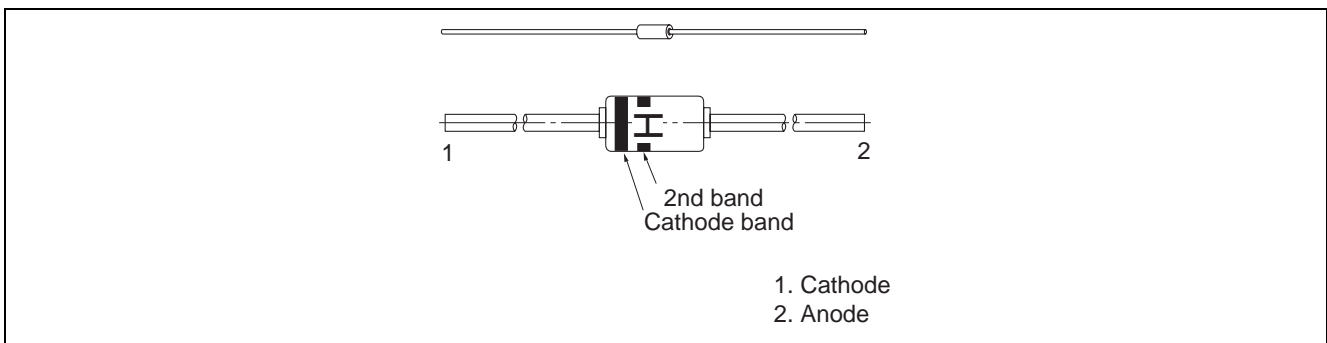
### Features

- 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	$V_F = 0.5$ V
Reverse current	$I_R$	—	—	50	$\mu$ A	$V_R = 0.5$ V
Reverse voltage	$V_R$	3.0	—	—	V	$I_R = 1$ mA
Capacitance	C	—	—	0.85	pF	$V_R = 0.5$ V, $f = 1$ MHz
ESD-Capability *	—	30	—	—	V	C = 200 pF, R = 0 $\Omega$ , Both forward and reverse direction 1 pulse.

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

Main Characteristic

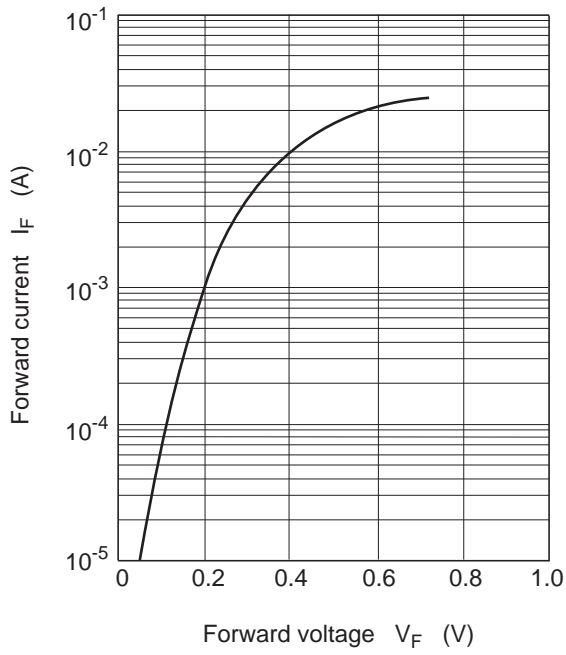


Fig.1 Forward current vs. Forward voltage

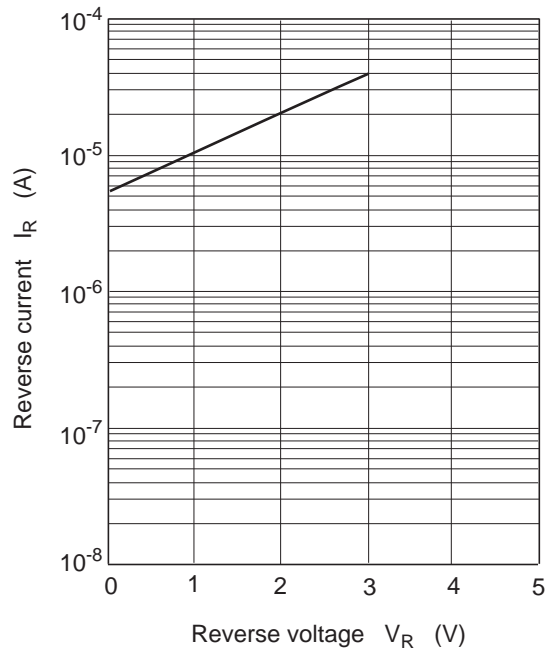


Fig.2 Reverse current vs. Reverse voltage

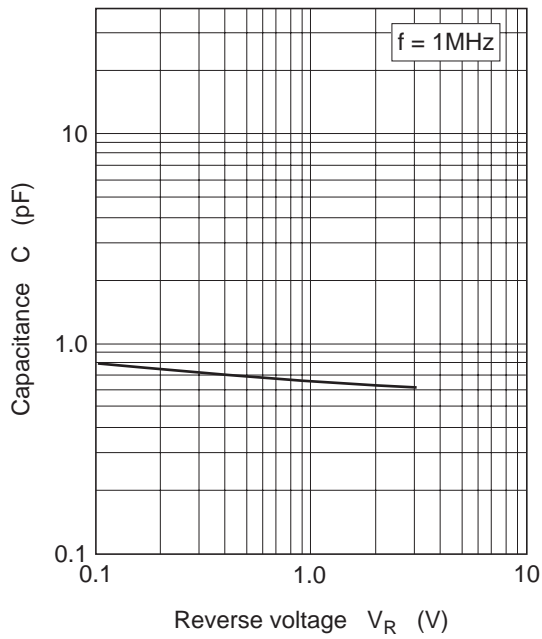


Fig.3 Capacitance vs. Reverse voltage

## Package Dimensions

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

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 leads are shown with break symbols to indicate they are longer than drawn.

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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