

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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Not recommended  
for new design

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The logo for Renesas, featuring the word "RENESAS" in a bold, sans-serif font with a stylized "R" that has a horizontal bar extending to the left.

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## 1SS88

### Silicon Schottky Barrier Diode for CATV Balanced Mixer

REJ03G0615-0300

Rev.3.00

May 24, 2007

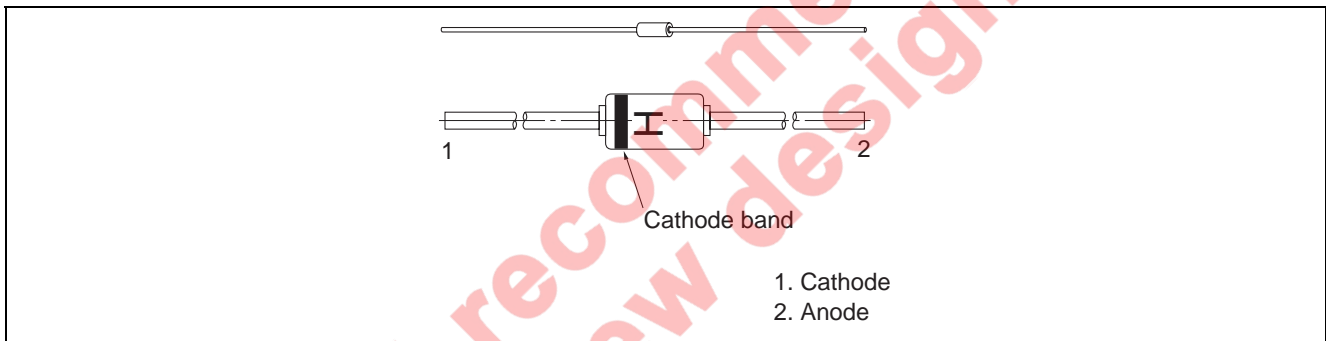
#### Features

- Low capacitance. (C = 0.97 pF max)
- High reliability with glass seal.

#### Ordering Information

Part No.	Cathode	Mark	Package Name	Package Code
1SS88	White	H	DO-35	GRZZ0002ZB-A

#### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	V
Peak forward current	$I_{FM}$	35	mA
Average rectified current	$I_o$	15	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 voltage	$V_{F1}$	365	—	430	mV	$I_F = 1 \text{ mA}$
	$V_{F2}$	520	—	600		$I_F = 10 \text{ mA}$
Reverse current	$I_{R1}$	—	—	0.2	$\mu\text{A}$	$V_R = 2 \text{ V}$
	$I_{R2}$	—	—	10		$V_R = 10 \text{ V}$
Capacitance	$C$	—	—	0.97	pF	$V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$
Capacitance deviation <sup>*3</sup>	$\Delta C$	—	—	0.1	pF	$V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$
Forward voltage deviation <sup>*3</sup>	$\Delta V_{F1}$	—	—	10	mV	$I_F = 2.5 \text{ mA}$
	$\Delta V_{F2}$	—	—	10		$I_F = 10 \text{ mA}$
ESD-Capability <sup>*1</sup>	—	30	—	—	V	$C = 200 \text{ pF}$ , $R = 0 \Omega$ , Both forward and reverse direction 1 pulse.

- Notes: 1. Failure criterion ;  $I_R \geq 50 \mu\text{A}$  at  $V_R = 10 \text{ V}$   
 2. Each group shall unify a multiple of 4 diodes.  
 3. Not applied to taping-type products.

Main Characteristic

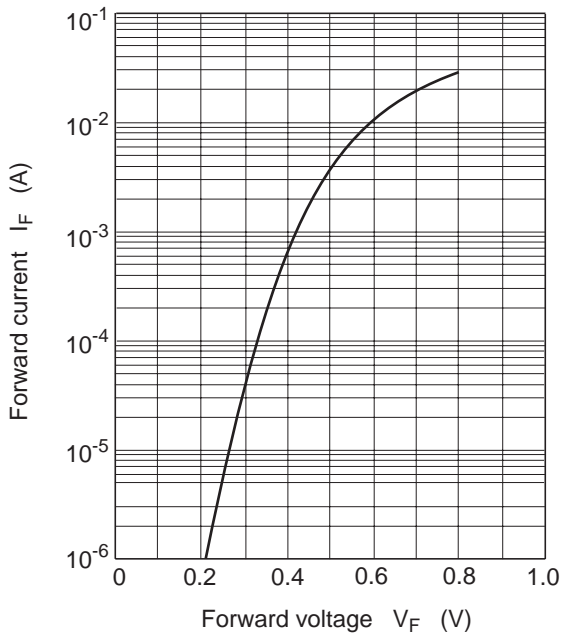


Fig.1 Forward current vs. Forward voltage

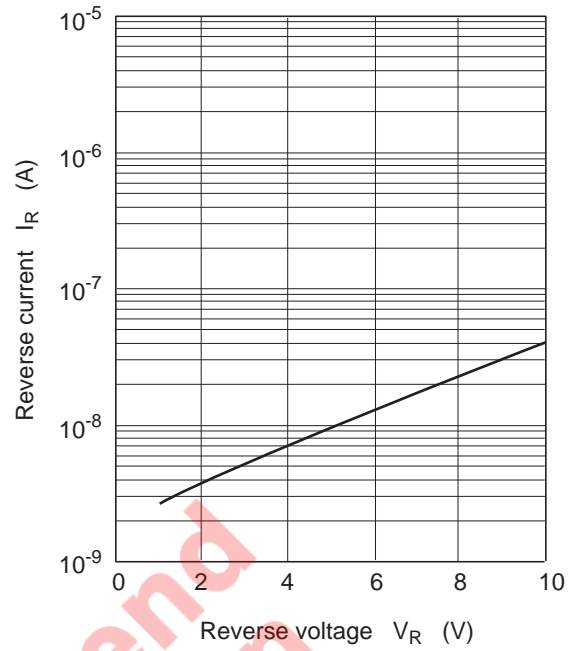


Fig.2 Reverse current vs. Reverse voltage

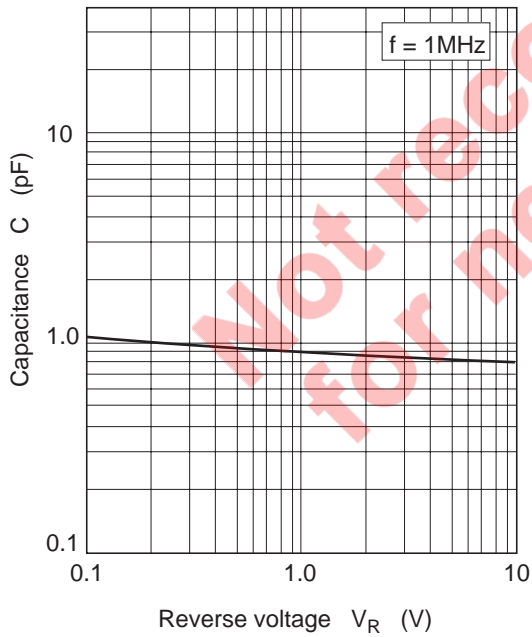
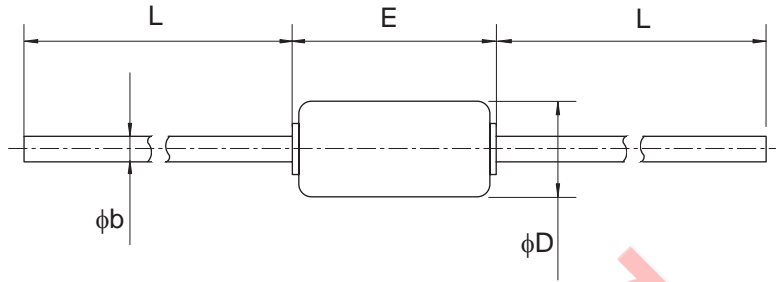


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
DO-35	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	-	-

Not recommend for new design

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