

1SS88

Silicon Schottky Barrier Diode for CATV Balanced Mixer

REJ03G0615-0300

Rev.3.00

May 24, 2007

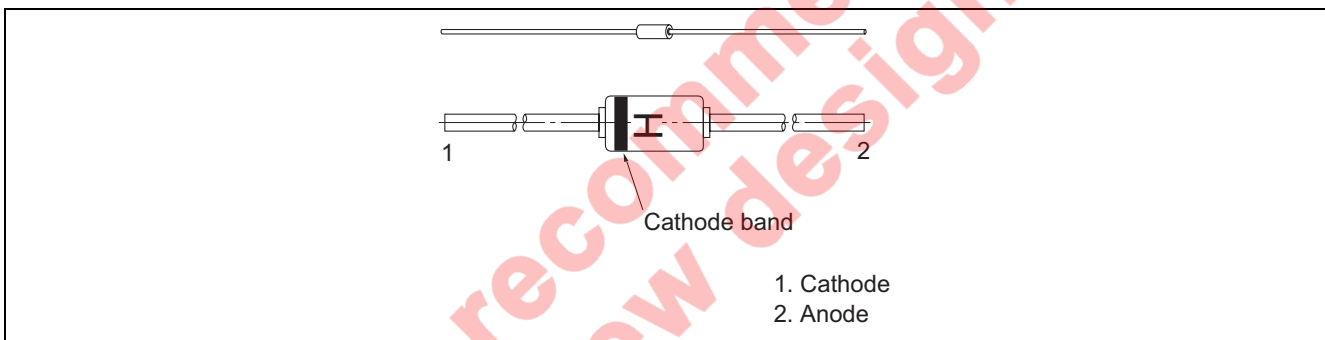
Features

- 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	μA	$V_R = 2 \text{ V}$
	I_{R2}	—	—	10		$V_R = 10 \text{ V}$
Capacitance	C	—	—	0.97	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Capacitance deviation ^{*3}	ΔC	—	—	0.1	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Forward voltage deviation ^{*3}	ΔV_{F1}	—	—	10	mV	$I_F = 2.5 \text{ mA}$
	ΔV_{F2}	—	—	10		$I_F = 10 \text{ mA}$
ESD-Capability ^{*1}	—	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

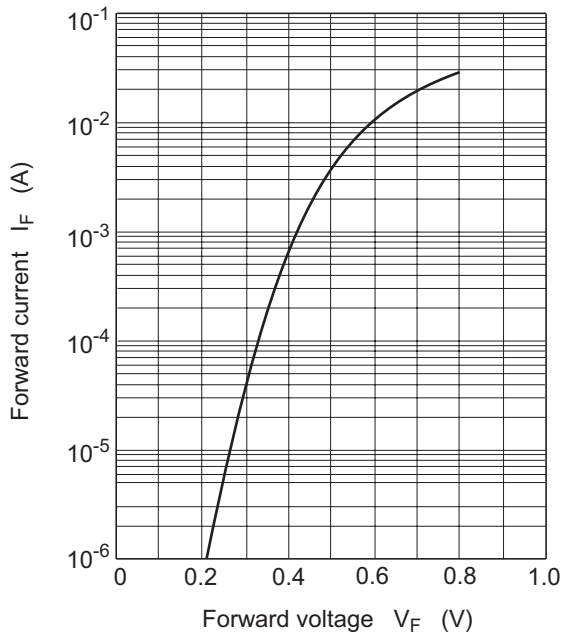


Fig.1 Forward current vs. Forward voltage

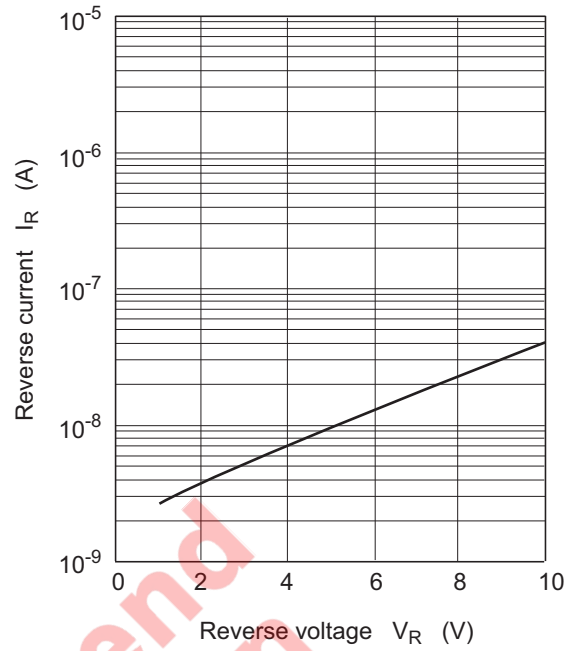


Fig.2 Reverse current vs. Reverse voltage

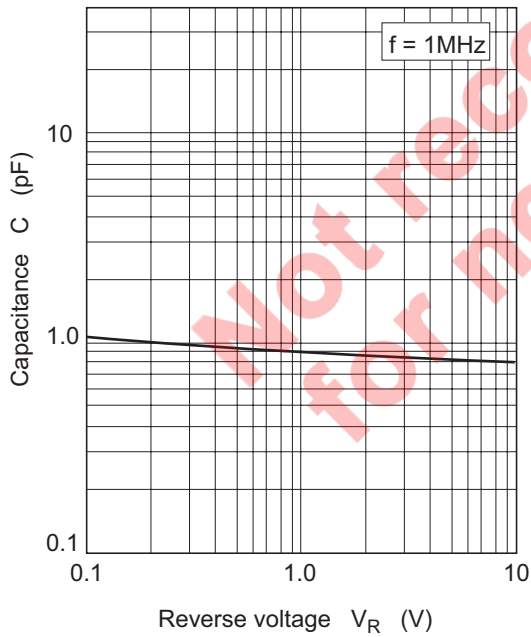
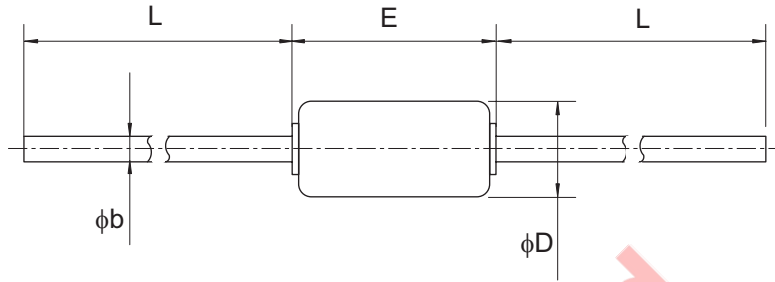


Fig.3 Capacitance vs. Reverse voltage

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
ϕb	-	0.5	-
ϕD	-	2.0	-
E	-	-	4.2
L	26.0	-	-

Not recommend for new design

Notes:

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