

# 1SS286

Silicon Schottky Barrier Diode for Various Detector, High Speed Switching

REJ03G0142-0300

Rev.3.00

May 24, 2007

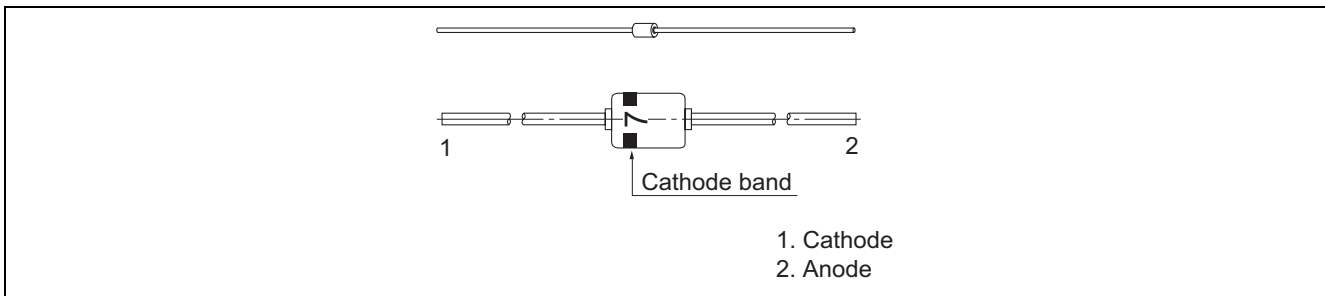
## Features

- Very low reverse current.
- Detection efficiency is very good.
- Small glass package (MHD) enables easy mounting and high reliability.

## Ordering Information

Part No.	Cathode	Mark	Package Name	Package Code
1SS286	GREEN	7	MHD	GRZZ0002ZC-A

## Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	25	V
Forward current	$I_F$	35	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	$V_F$	—	—	0.60	V	$I_F = 10 \text{ mA}$
Reverse voltage	$V_R$	25	—	—	V	$I_F = 10 \text{ } \mu\text{A}$
Reverse current	$I_R$	—	—	10	nA	$V_R = 10 \text{ V}$
Capacitance	$C$	—	—	1.20	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Capacitance deviation <sup>*3</sup>	$\Delta C$	—	—	0.10	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Forward voltage deviation <sup>*3</sup>	$\Delta V_F$	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability <sup>*1</sup>	—	10	—	—	V	$C = 200 \text{ pF}, R = 0 \text{ } \Omega$ , Both forward and reverse direction 1 pulse.

- Notes: 1. Failure criterion ;  $I_R \geq 20 \text{ nA}$  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

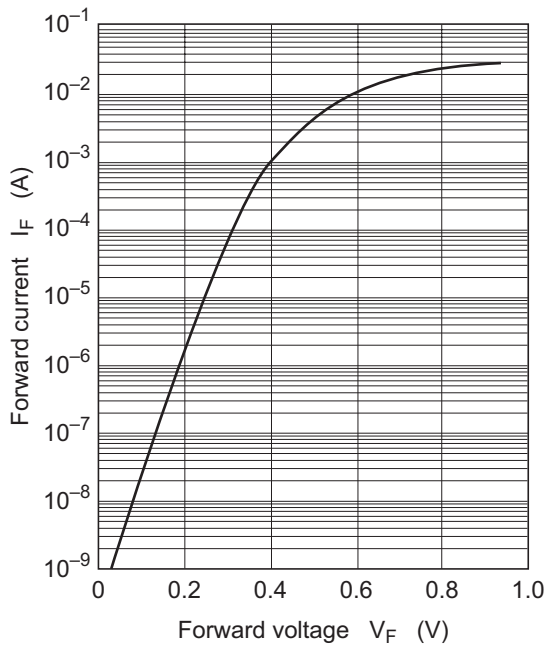


Fig.1 Forward current vs. Forward voltage

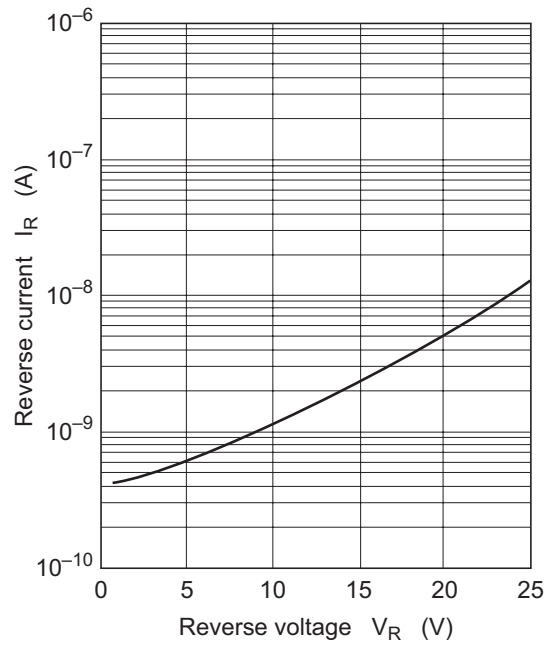


Fig.2 Reverse current vs. Reverse voltage

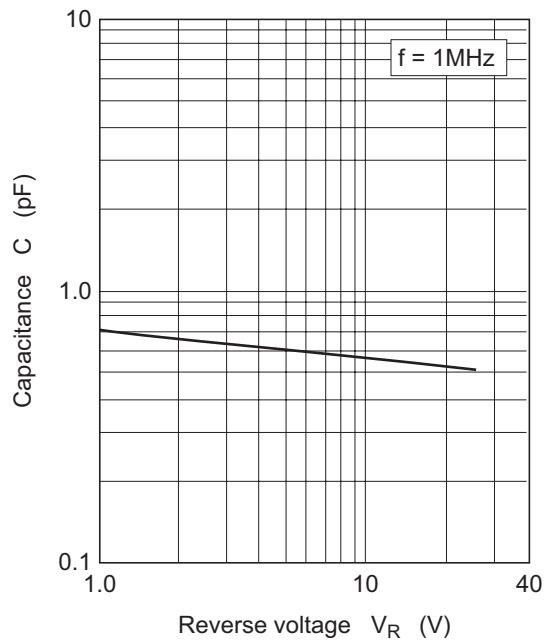
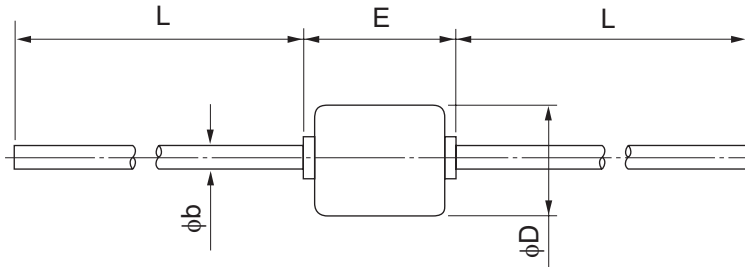


Fig.2 Capacitance vs. Reverse voltage

## Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
MHD	—	GRZZ0002ZC-A	MHD / MHDV	0.084g



Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
$\phi b$	-	0.4	-
$\phi D$	-	2.0	-
E	-	-	2.4
L	26.0	-	-

Notes:

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