

1SS286

Silicon Schottky Barrier Diode for Various Detector, High Speed Switching

REJ03G0142-0300

Rev.3.00

May 24, 2007

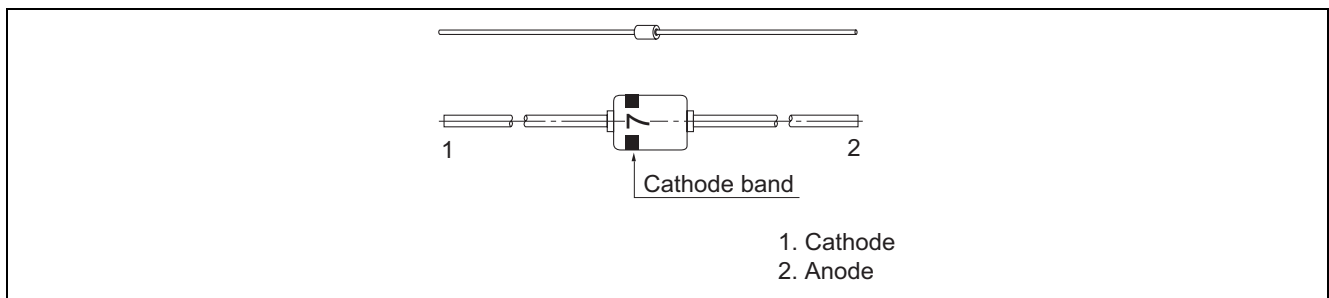
Features

- 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 ^{*3}	ΔC	—	—	0.10	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Forward voltage deviation ^{*3}	ΔV_F	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability ^{*1}	—	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

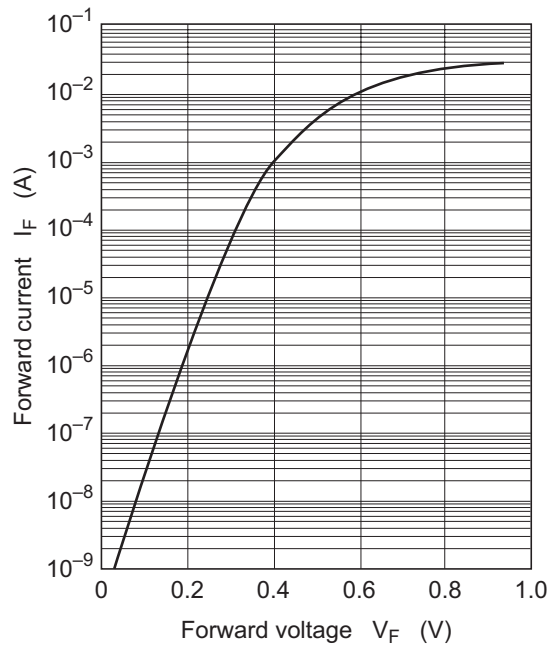


Fig.1 Forward current vs. Forward voltage

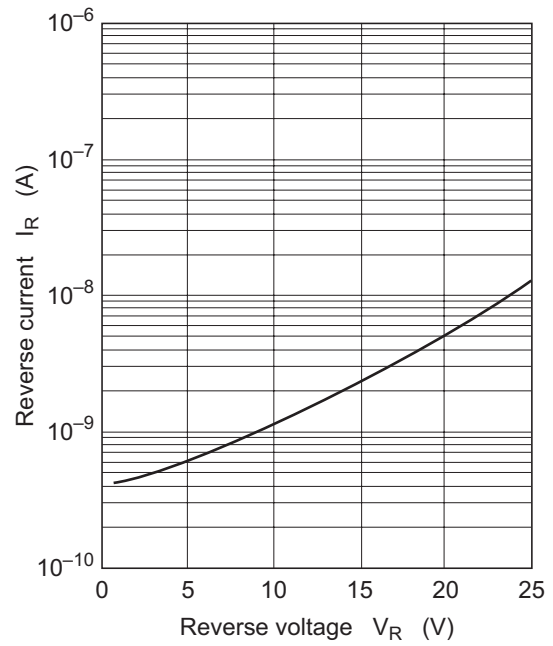


Fig.2 Reverse current vs. Reverse voltage

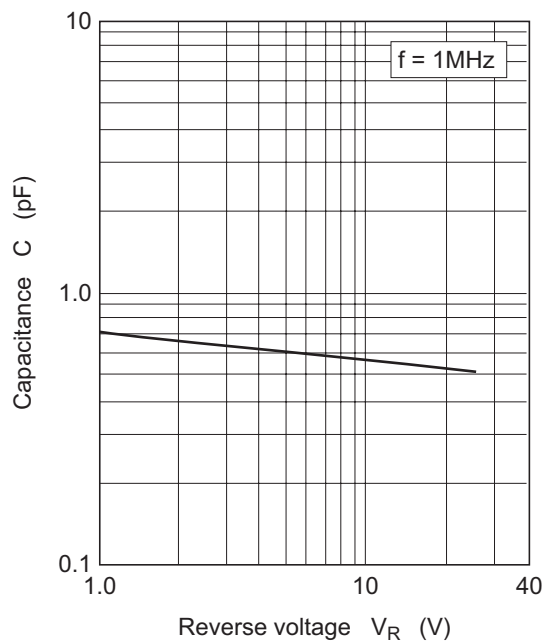


Fig.2 Capacitance vs. Reverse voltage

Package Dimensions

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

The diagram shows a top-down view of the MHD package. It is a rectangular component with a central square feature. The overall width is divided into three sections: two outer sections of length L and a central section of length E. The central section contains a square feature with a width of phi D. The distance from the center of the square feature to the outer edge of the package is phi b.

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
ϕb	-	0.4	-
ϕD	-	2.0	-
E	-	-	2.4
L	26.0	-	-

Notes:

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