

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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# 1SS270

## Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0566-0400  
Rev.4.00  
Sep 29, 2008

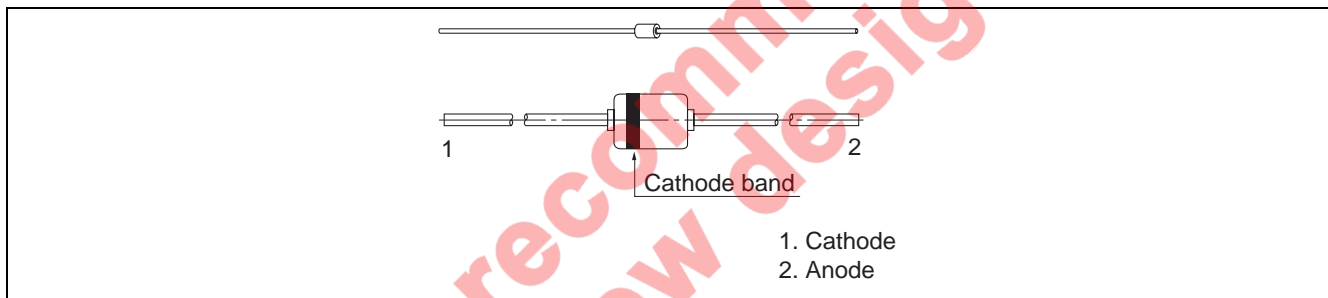
### Features

- Low capacitance. ( $C = 3.0 \text{ pF max}$ )
- Short reverse recovery time. ( $t_{rr} = 3.5 \text{ ns max}$ )
- Small glass package (MHD) enables easy mounting and high reliability.

### Ordering Information

Part No.	Cathode Band	Package Name	Package Code
1SS270	Light Blue	MHD	GRZZ0002ZC-A

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	35	V
Reverse voltage	$V_R$	30	V
Average rectified current	$I_o$	150	mA
Peak forward current	$I_{FM}$	450	mA
Non-Repetitive peak forward surge current	$I_{FSM}^*$	1	A
Power dissipation	$P_d$	250	mW
Junction temperature	$T_j$	175	°C
Storage temperature	$T_{stg}$	-65 to +175	°C

Note: Within 1s forward surge current.

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.8	V	$I_F = 10 \text{ mA}$
Reverse current	$I_R$	—	—	1.0	$\mu\text{A}$	$V_R = 30 \text{ V}$
Capacitance	C	—	—	3.0	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	3.5	ns	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$

Not recommended  
for new designs

Main Characteristic

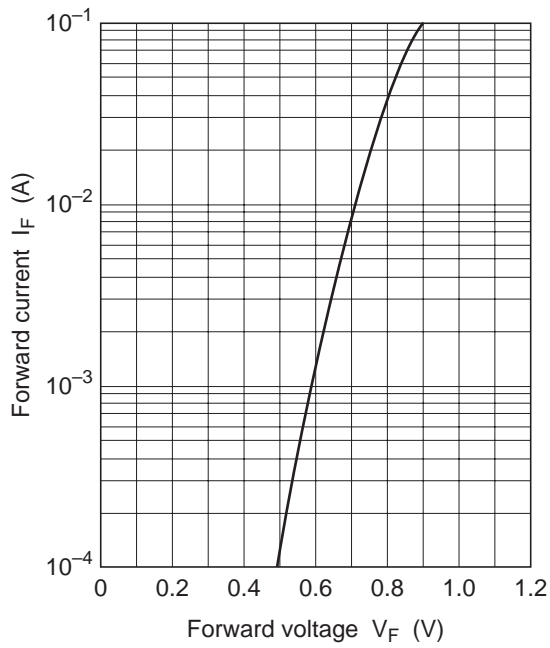


Fig.1 Forward current vs. Forward voltage

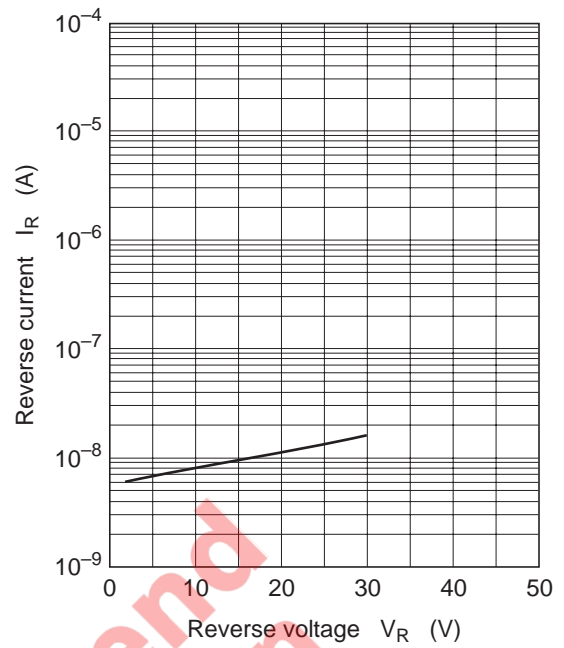


Fig.2 Reverse current vs. Reverse voltage

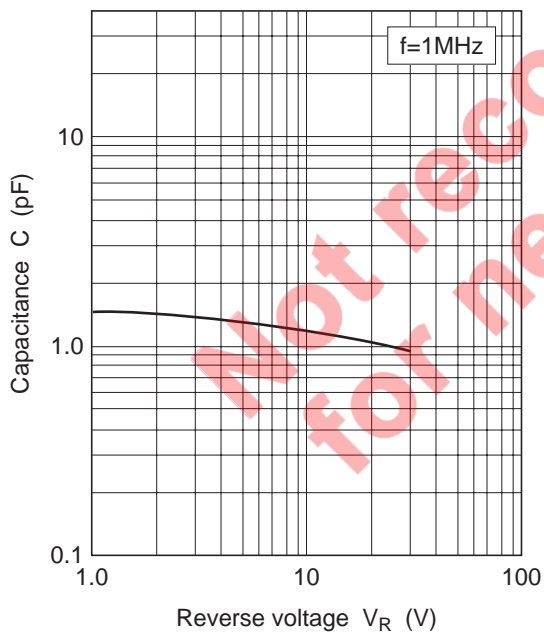
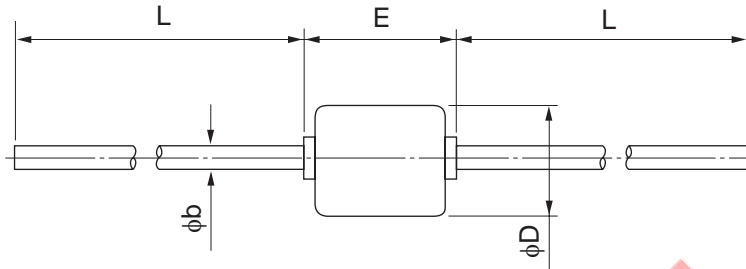


Fig.3 Capacitance vs. Reverse voltage

## Package Dimensions

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

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