

# HSD226

## Silicon Schottky Barrier Diode for High Speed Switching

REJ03G0603-0400

Rev.4.00

Feb 06, 2007

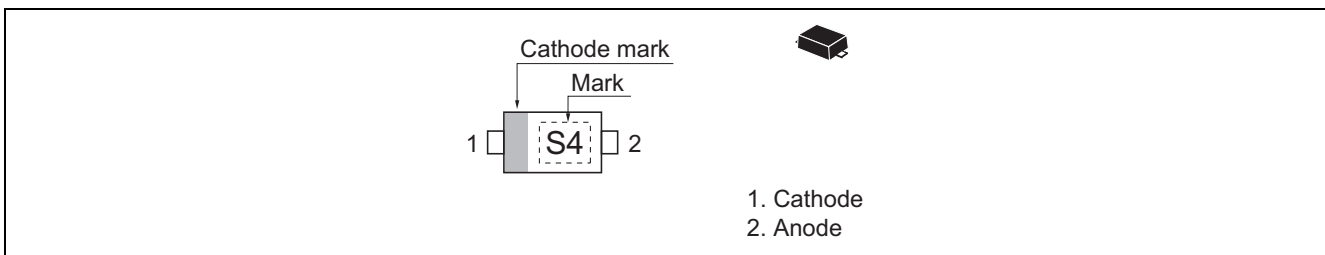
### Features

- Low Power consumption (Low reverse leak current) and high speed (Low capacitance).
- Lineup of Environmental friendly Halogen free type (HSD226-N)
- Super small Flat Lead Package (SFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HSD226	S4	SFP	PUSF0002ZB-A
HSD226-N (Halogen-free type)			

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	25	V
Non-Repetitive peak forward surge current	$I_{FSM}^*$	200	mA
Forward current	$I_F$	50	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: 10 ms sine wave 1 pulse

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	—	0.33	V	$I_F = 1 \text{ mA}$
	$V_{F2}$	—	—	0.38	V	$I_F = 5 \text{ mA}$
Reverse current	$I_R$	—	—	450	nA	$V_R = 20 \text{ V}$
Capacitance	C	—	—	2.80	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$

Note: For SFP package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

### Main Characteristic

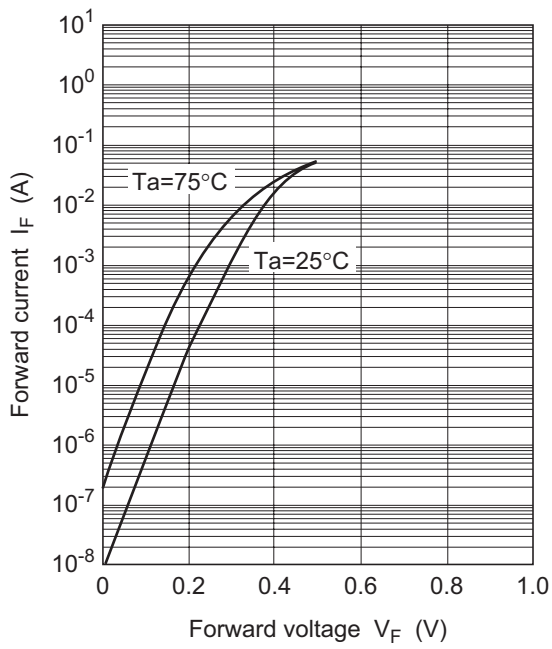


Fig.1 Forward current vs. Forward voltage

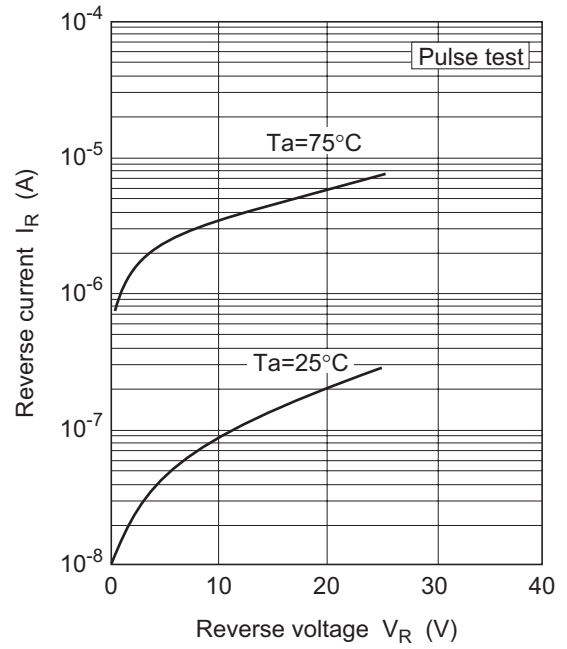


Fig.2 Reverse current vs. Reverse voltage

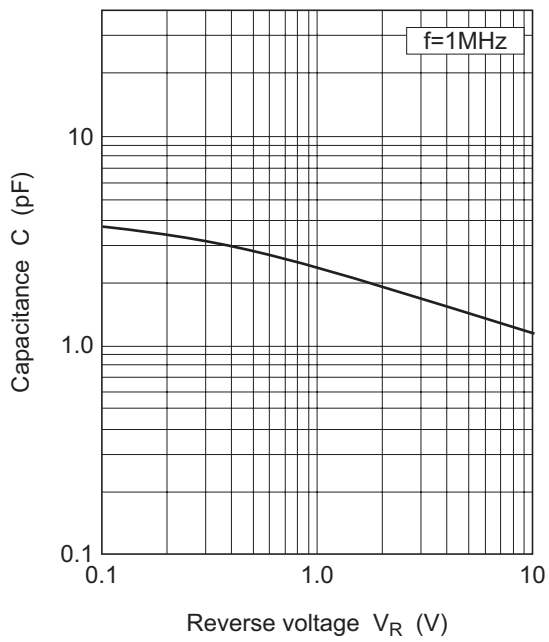
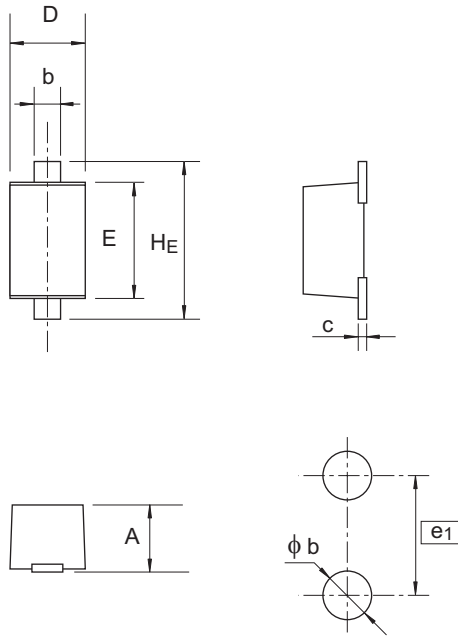


Fig.3 Capacitance vs. Reverse voltage

### Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SFP	—	PUSF0002ZB-A	SFP / SFPV	0.0010g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	—	0.55
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.55	0.60	0.65
E	0.90	1.00	1.10
$H_E$	1.30	1.40	1.50
$\phi b$	—	0.50	—
$e_1$	—	1.40	—

Notes:

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