

## HSD226

### Silicon Schottky Barrier Diode for High Speed Switching

REJ03G0603-0400

Rev.4.00

Feb 06, 2007

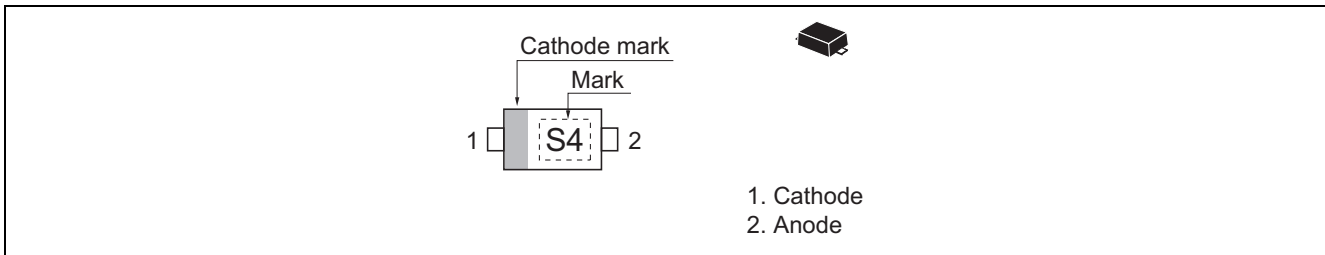
#### Features

- 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

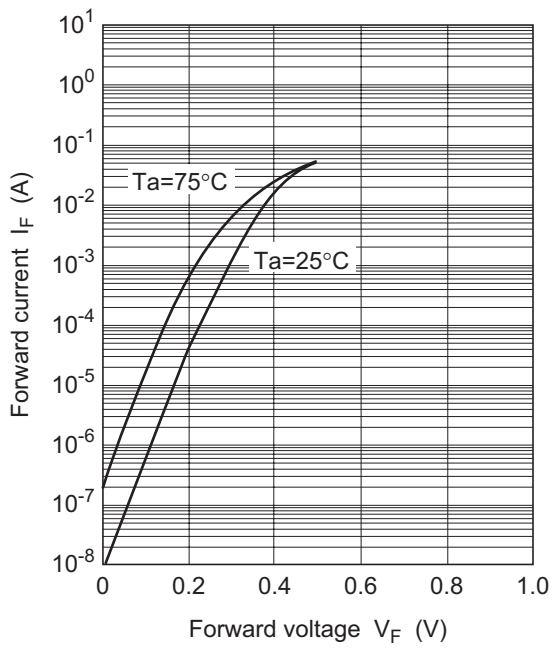


Fig.1 Forward current vs. Forward voltage

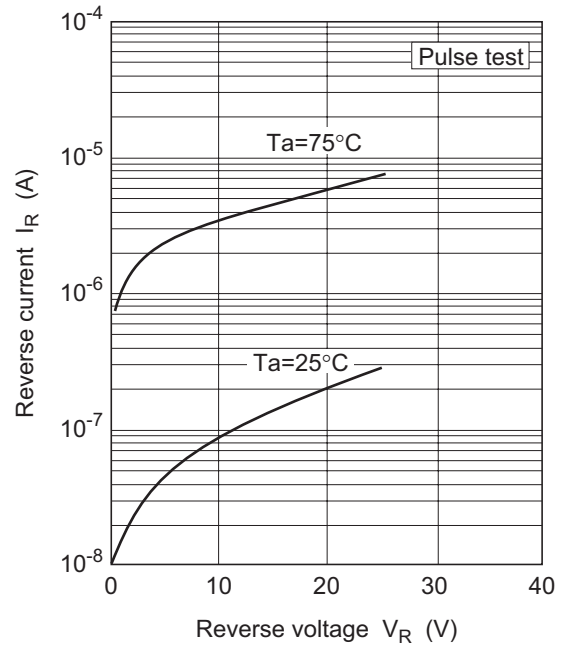


Fig.2 Reverse current vs. Reverse voltage

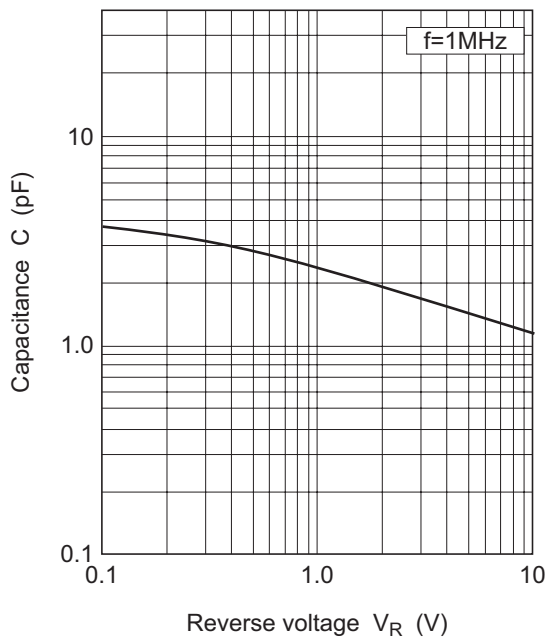
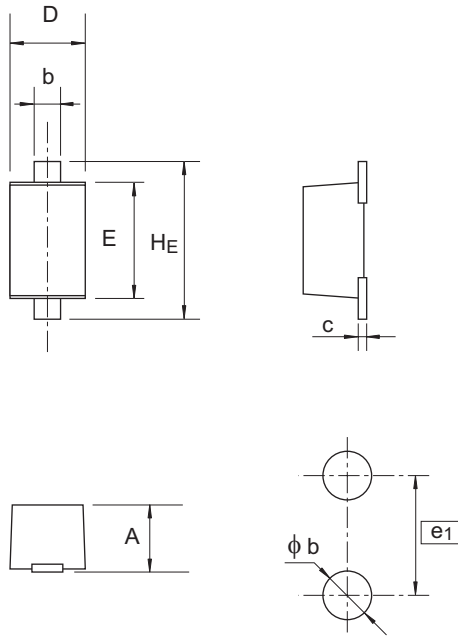


Fig.3 Capacitance vs. Reverse voltage

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	—

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