

HSC285

Silicon Schottky Barrier Diode for Detector

REJ03G0011-0200
Rev.2.00
May 17, 2006

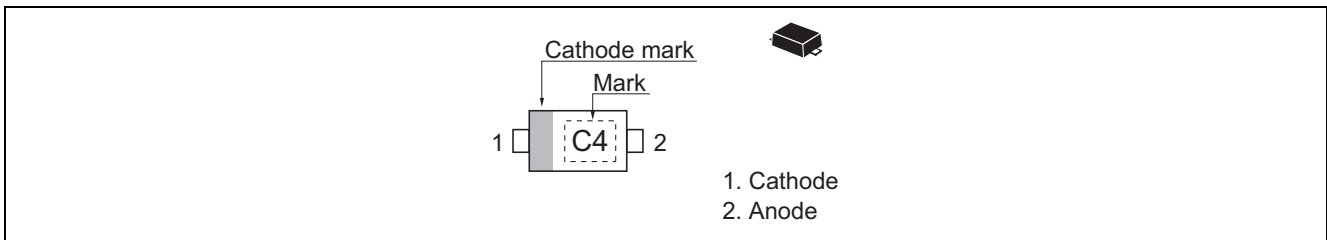
Features

- Low forward voltage, Low capacitance and High detection sensitivity.
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HSC285	C4	UFP	PWFS0002ZA-A

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	2	V
Average rectified current	I_O	5	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.15	V	$I_F = 0.1 \text{ mA}$
	V_{F2}	—	—	0.27		$I_F = 1 \text{ mA}$
Capacitance	C	—	0.3	—	pF	$V_R = 0.5 \text{ V}$, $f = 1 \text{ MHz}$
ESD-Capability *1	—	10	—	—	V	C = 200 pF, $R_L = 0 \Omega$, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; $I_R \geq 100 \mu\text{A}$ at $V_R = 0.5 \text{ V}$

Main Characteristic

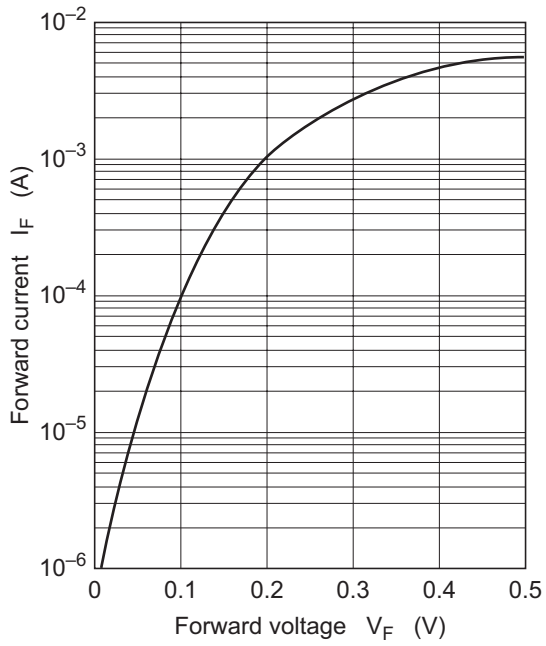


Fig.1 Forward current vs. Forward voltage

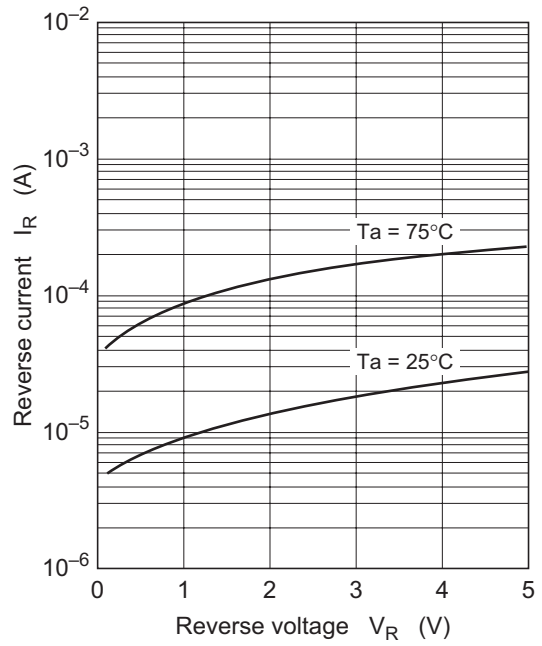


Fig.2 Reverse current vs. Reverse voltage

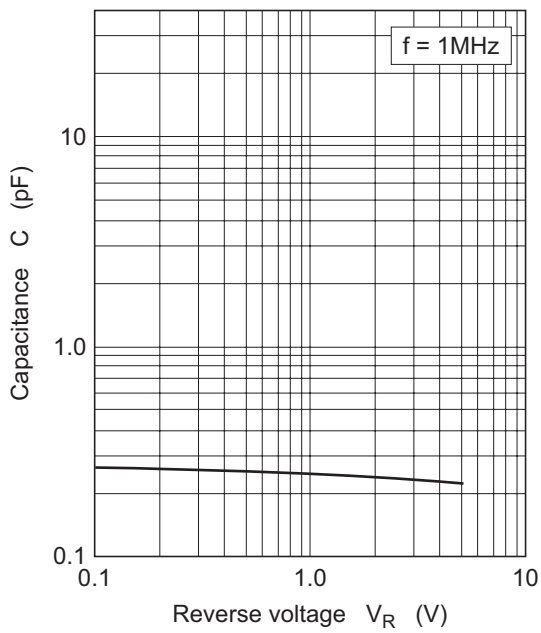
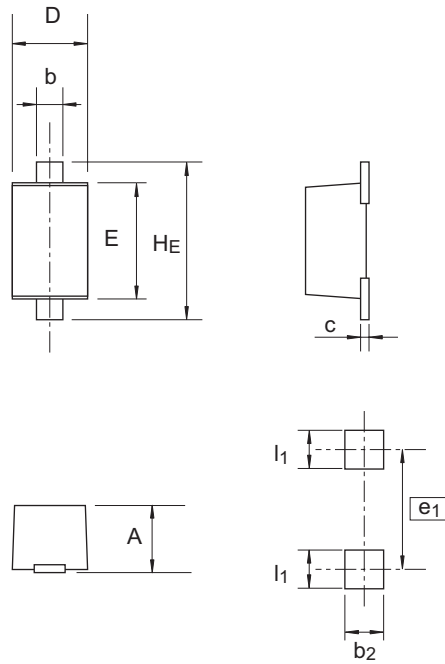


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
UFP	SC-79	PWSF0002ZA-A	UFP / UFPV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.70	0.80	0.90
E	1.10	1.20	1.30
H_E	1.50	1.60	1.70
b_2	—	0.80	—
e_1	—	1.70	—
l_1	—	0.60	—

Keep safety first in your circuit designs!

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