

To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

Cautions

Keep safety first in your circuit designs!

1. Renesas Technology Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage.

Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HSC88

Silicon Schottky Barrier Diode for Various Detector, Mixer



ADE-208-826 (Z)

Rev. 0
Nov. 1999

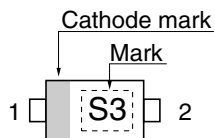
Features

- Low capacitance. ($C = 0.8\text{pF}$ max)
- Low forward voltage.
- Ultra small Flat Package (UFP) is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSC88	S3	UFP

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average rectified current	I_o	15	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	350	—	420	mV	$I_F = 1 \text{ mA}$
	V_{F2}	500	—	580		$I_F = 10 \text{ mA}$
Reverse current	I_{R1}	—	—	0.2	μA	$V_R = 2\text{V}$
	I_{R2}	—	—	10		$V_R = 10\text{V}$
Capacitance	C	—	—	0.8	pF	$V_R = 0\text{V}$, $f = 1 \text{ MHz}$
ESD-Capability ^{**1}	—	30	—	—	V	C = 200pF, Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; $I_R \geq 400\text{nA}$ at $V_R = 2 \text{ V}$

Main Characteristic

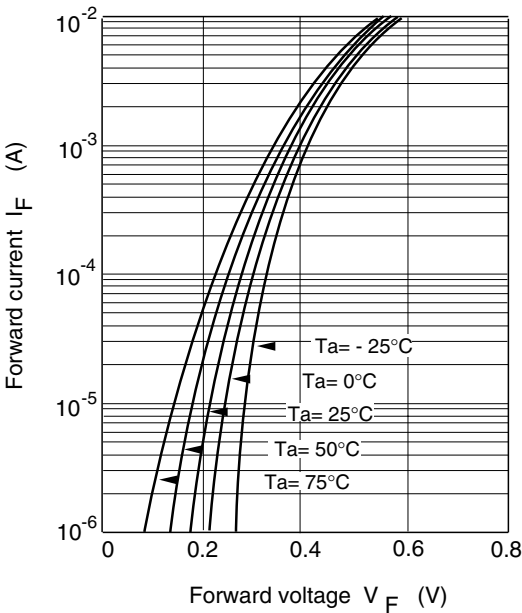


Fig.1 Forward current Vs. Forward voltage

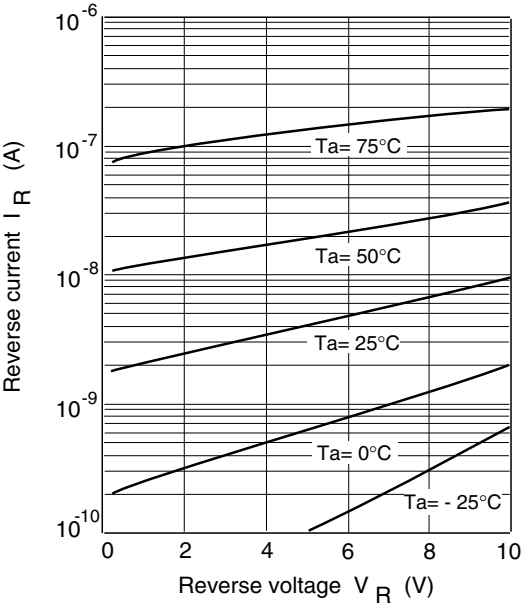


Fig.2 Reverse current Vs. Reverse voltage

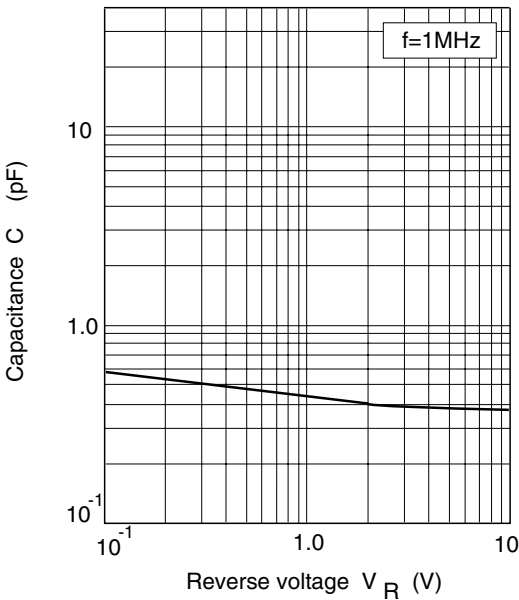
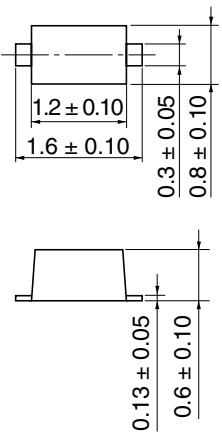


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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