

To all our customers

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

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Keep safety first in your circuit designs!

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# HSC277

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch



ADE-208-413A (Z)

Rev. 1  
Oct. 2000

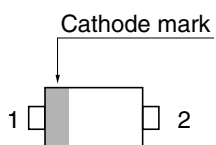
## Features

- Low forward resistance. ( $r_f = 0.7\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## Ordering Information

Type No.	Cathode Mark	Package Code
HSC277	Laser	UFP

## Pin Arrangement



1. Cathode  
2. Anode

**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	35	V
Junction temperature	T <sub>J</sub>	125	°C
Power dissipation	P <sub>d</sub>	150	mW
Operation temperature	T <sub>opr</sub>	-20 to +60	°C
Storage temperature	T <sub>stg</sub>	-45 to +125	°C

**Electrical Characteristics**

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V <sub>R</sub>	35	—	—	V	I <sub>R</sub> = 10 μA
Forward voltage	V <sub>F</sub>	—	—	1.0	V	I <sub>F</sub> = 10 mA
Reverse current	I <sub>R</sub>	—	—	50	nA	V <sub>R</sub> = 25 V
Capacitance	C	—	—	1.2	pF	V <sub>R</sub> = 6 V, f = 1 MHz
Forward resistance	r <sub>f</sub>	—	—	0.7	Ω	I <sub>F</sub> = 2 mA, f = 100 MHz

Main Characteristic

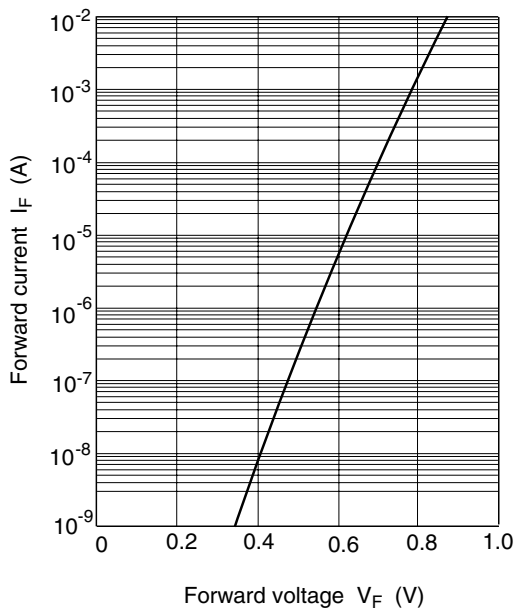


Fig.1 Forward current Vs. Forward voltage

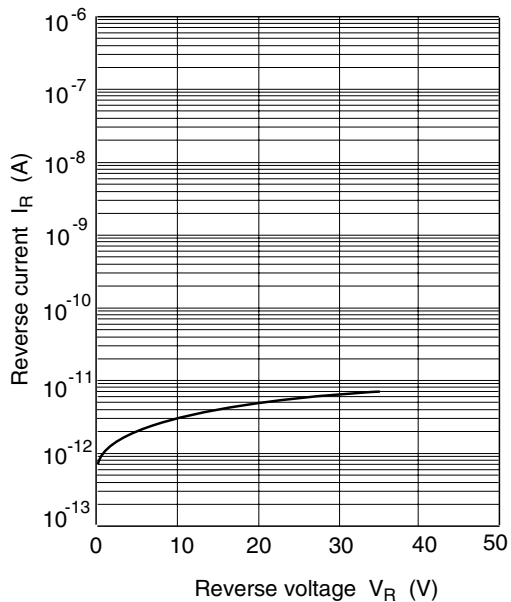


Fig.2 Reverse current Vs. Reverse voltage

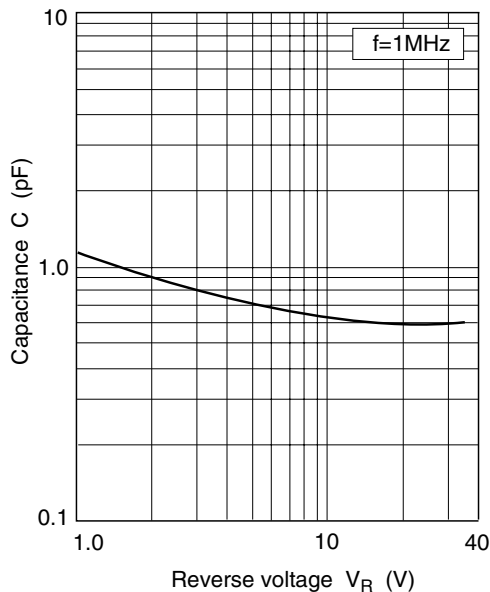


Fig.3 Capacitance Vs. Reverse voltage

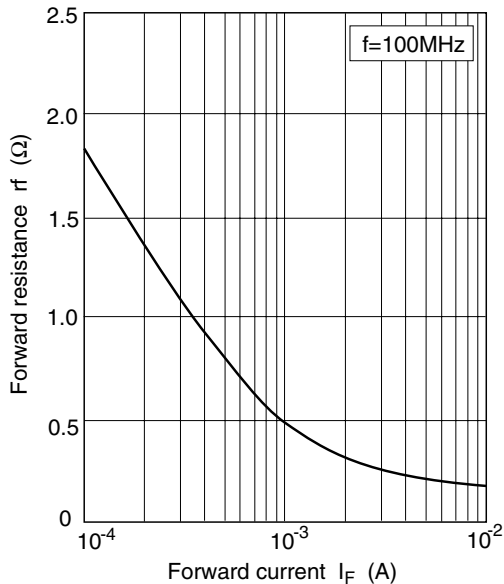
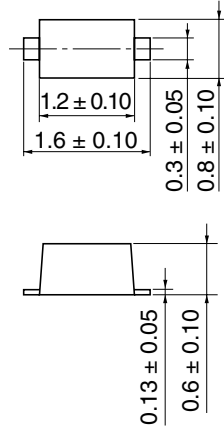


Fig.4 Forward resistance Vs. Forward current

## Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.0016 g

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