

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# HSC277

## Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

REJ03G0585-0200  
(Previous: ADE-208-413A)  
Rev.2.00  
Mar 29, 2005

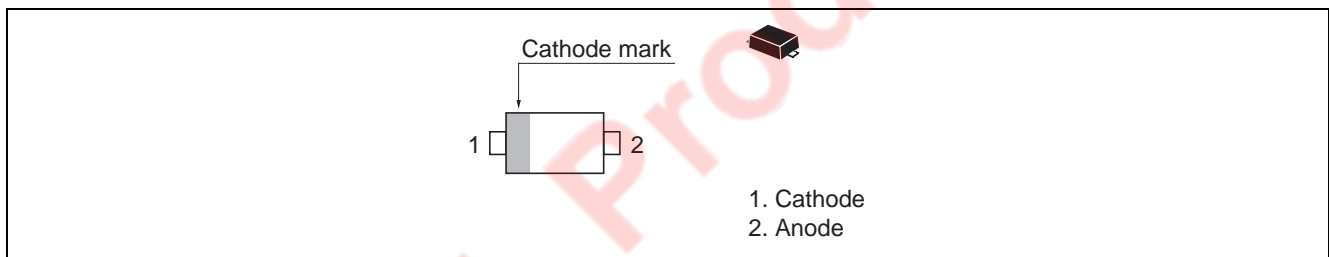
### Features

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

### Ordering Information

Type No.	Cathode Mark	Package Name	Package Code (Previous Code)
HSC277	Laser	UFP	PWSF0002ZA-A (UFP)

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	35	V
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-45 to +125	°C
Operation temperature	$T_{opr}$	-20 to +60	°C

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	$V_R$	35.0	—	—	V	$I_R = 10 \mu A$
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 10 \text{ mA}$
Reverse current	$I_R$	—	—	50	nA	$V_R = 25 \text{ V}$
Capacitance	$C$	—	—	1.2	pF	$V_R = 6 \text{ V}, f = 1 \text{ MHz}$
Forward resistance	$r_f$	—	—	0.7	$\Omega$	$I_F = 2 \text{ mA}, f = 100 \text{ MHz}$

## Main Characteristic

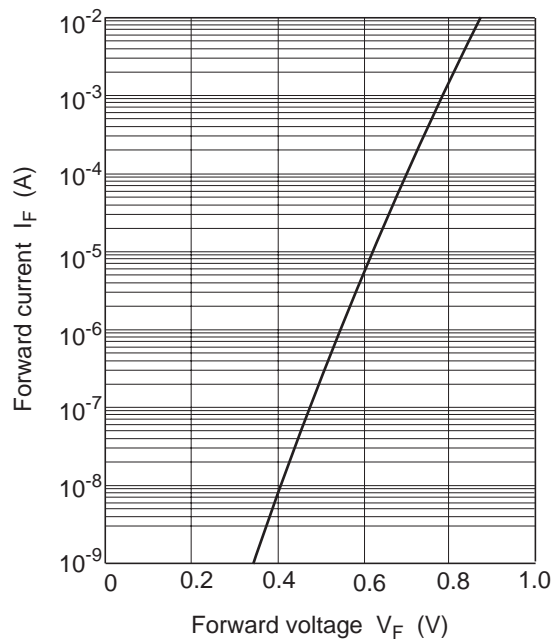


Fig.1 Forward current vs. Forward voltage

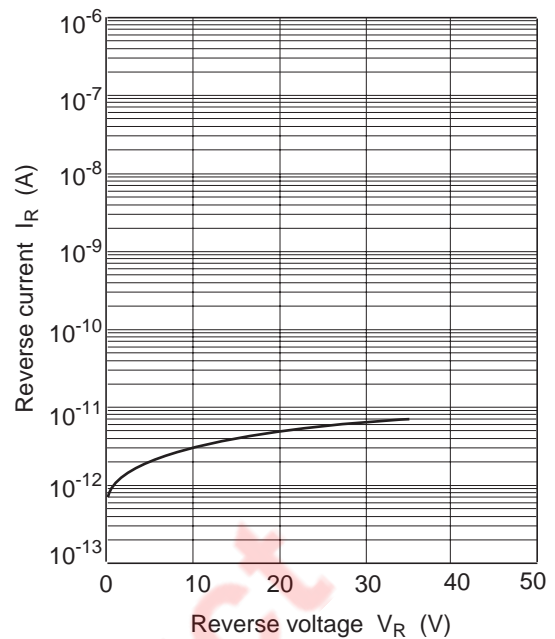


Fig.2 Reverse current vs. Reverse voltage

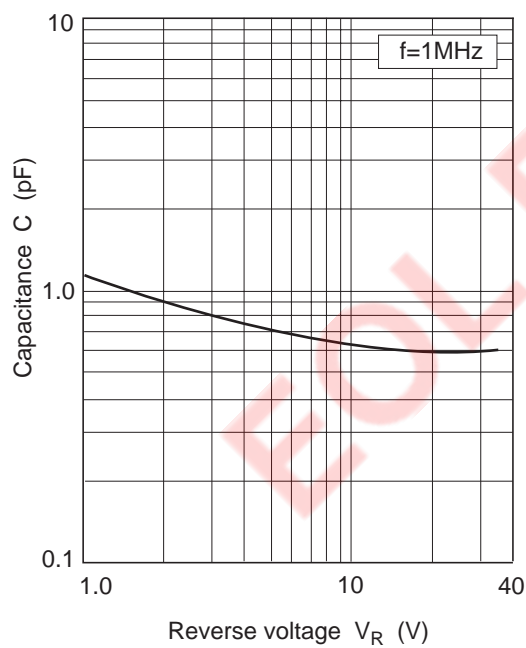


Fig.3 Capacitance vs. Reverse voltage

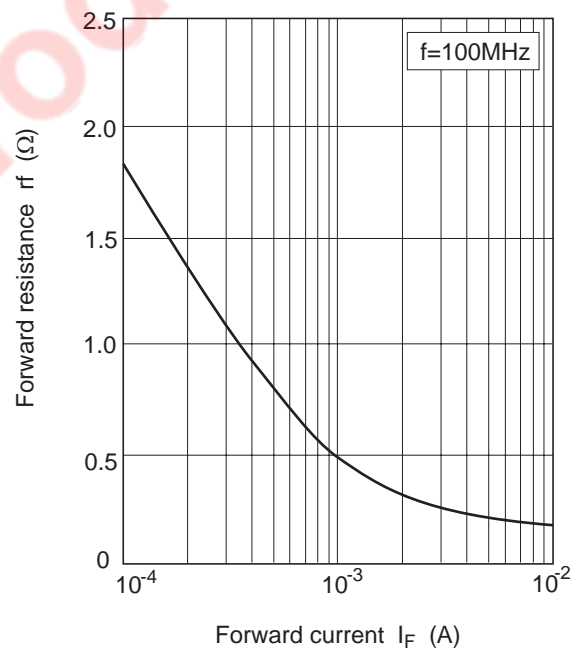
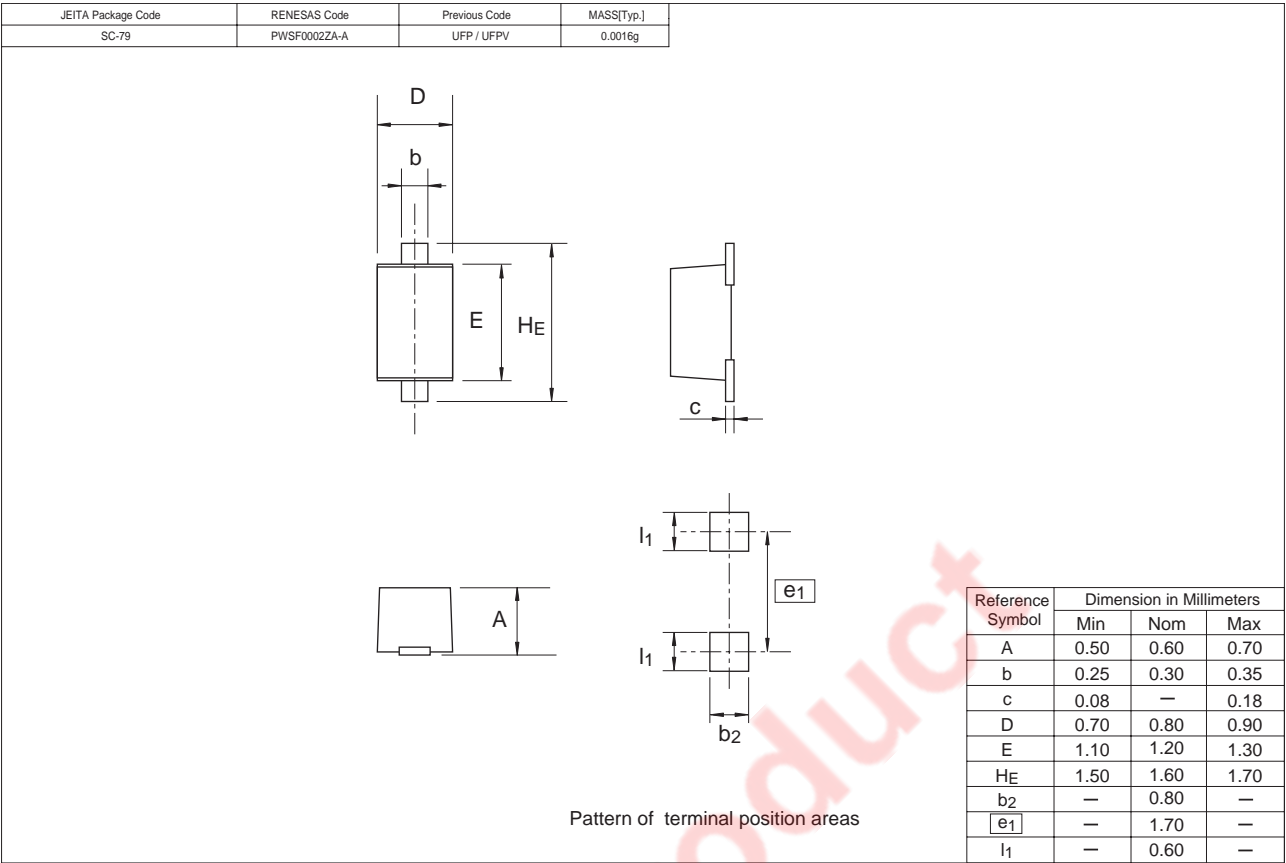


Fig.4 Forward resistance vs. Forward current

Package Dimensions



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