# **HSC277**

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

# **HITACHI**

ADE-208-413 (Z) Rev. 0 Dec. 1995

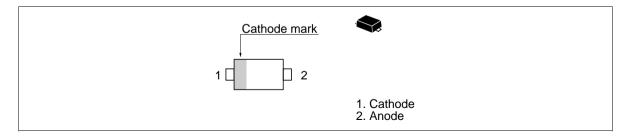
#### Features

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

#### **Ordering Information**

Type No.	Cathode Mark	Package Code
HSC277	Laser	UFP

#### Outline



## **Absolute Maximum Ratings** (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	35	V
Junction temperature	Tj	125	°C
Power dissipation	Pd	150	mW
Operation temperature	Topr	-20 to +60	°C
Storage temperature	Tstg	-45 to +125	°C



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## **Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse voltage	$V_R$	35	_	_	V	$I_R = 10\mu A$
Reverse current	I <sub>R</sub>	_	_	50	μΑ	V <sub>R</sub> = 25V
Forward voltage	$V_{F}$	_	_	1.0	V	$I_F = 10mA$
Capacitance	С	_	_	1.2	pF	$V_R = 6V, f = 1MHz$
Forward resistance	r <sub>f</sub>	_	_	0.7	Ω	$I_F = 2mA$ , $f = 100MHz$

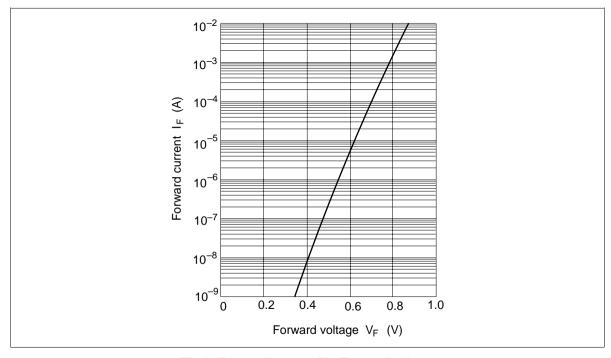


Fig.1 Forward current Vs. Forward voltage

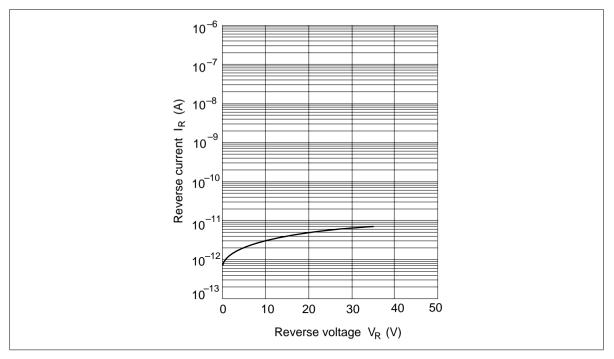


Fig.2 Reverse current Vs. Reverse voltage

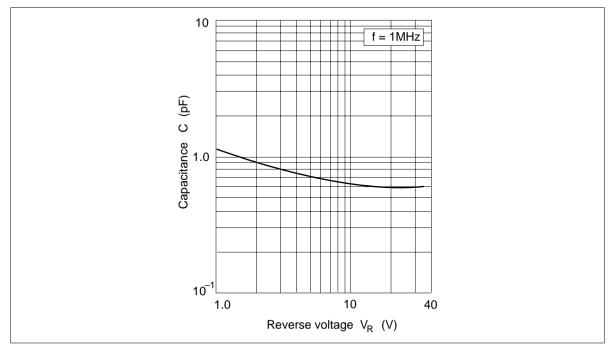


Fig.3 Capacitance Vs. Reverse voltage

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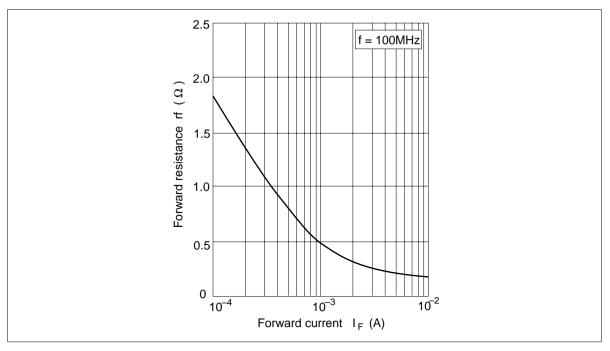
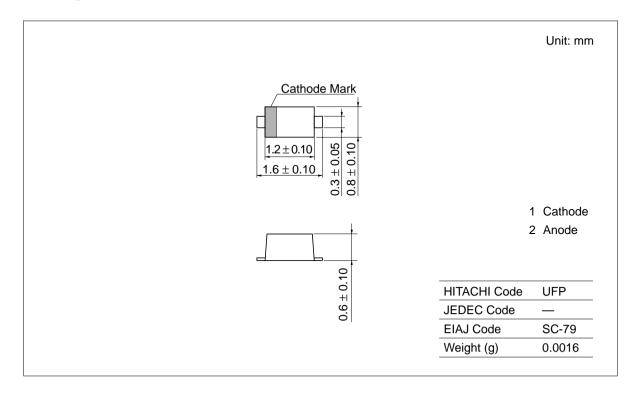


Fig.4 Forward resistance Vs. Forward current

### **Package Dimensions**



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