

HSC277

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

HITACHI

 Rev. 0
 Nov. 1995

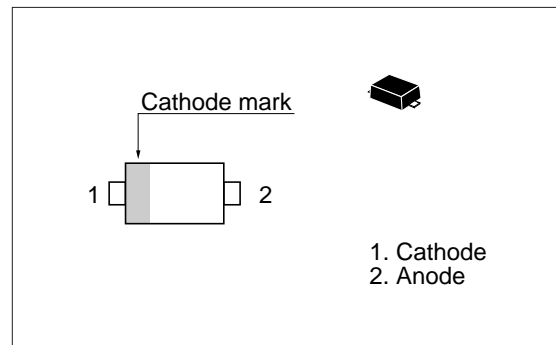
Features

- 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

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	35	—	—	V	$I_R = 10 \mu\text{A}$
Reverse current	I_R	—	—	50	nA	$V_R = 25 \text{ V}$
Forward voltage	V_F	—	—	1.0	V	$I_F = 10 \text{ mA}$
Capacitance	C	—	—	1.2	pF	$V_R = 6 \text{ V}$, $f = 1 \text{ MHz}$
Forward resistance	r_f	—	—	0.7	Ω	$I_F = 2 \text{ mA}$, $f = 100 \text{ MHz}$

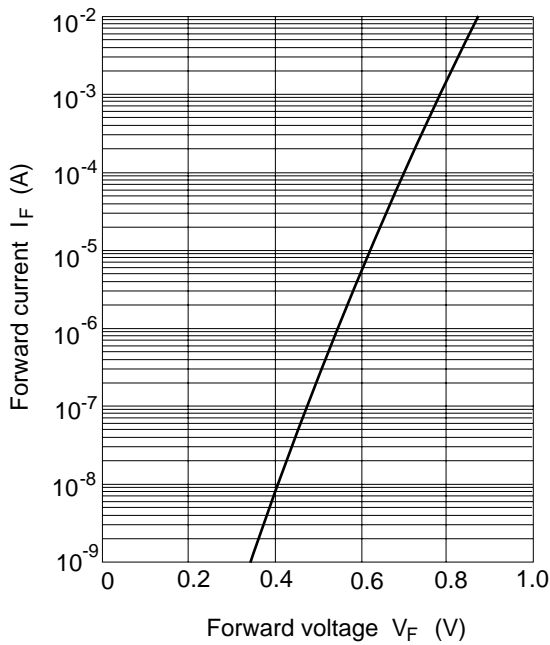


Fig.1 Forward current Vs. Forward voltage

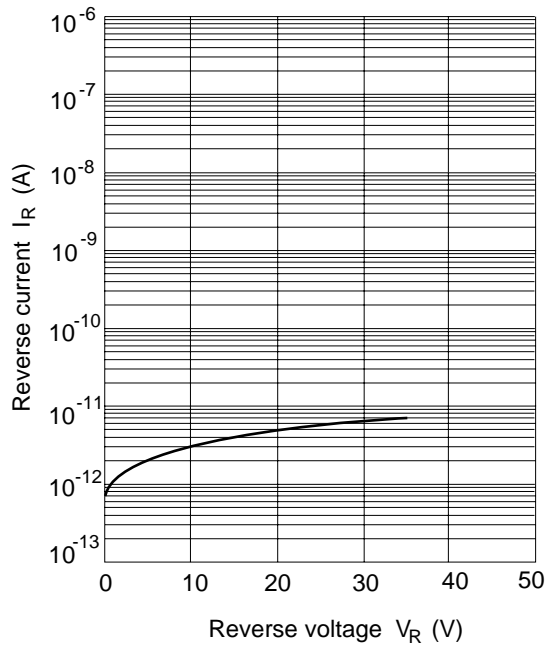


Fig.2 Reverse current Vs. Reverse voltage

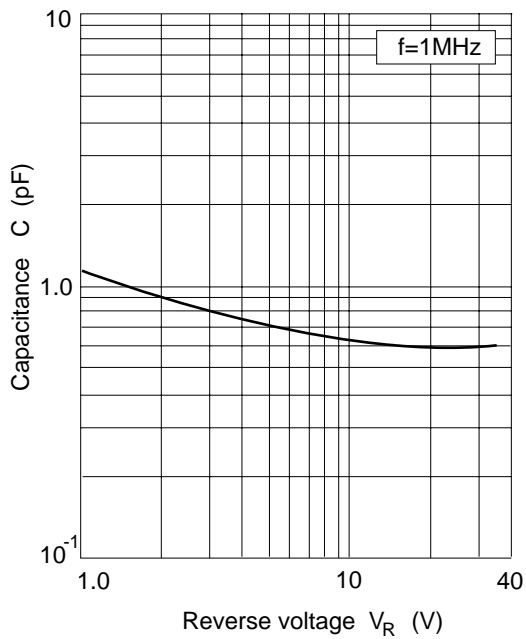


Fig.3 Capacitance Vs. Reverse voltage

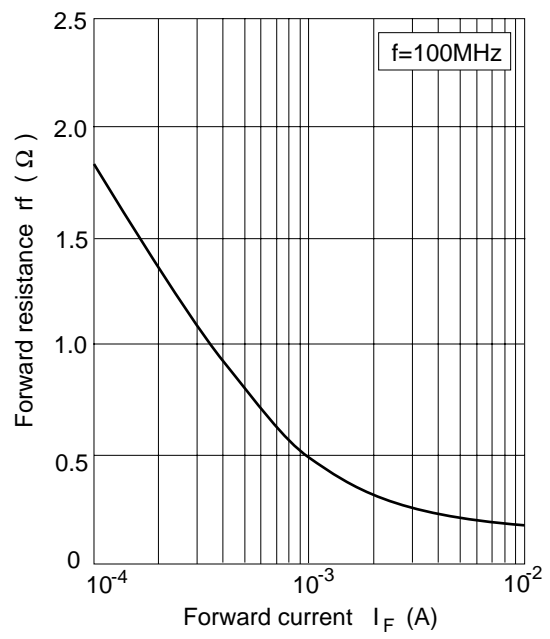
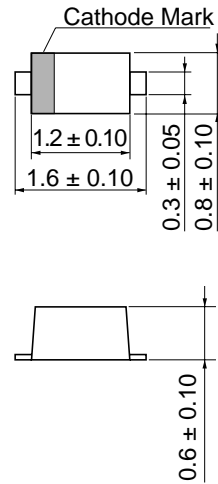


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	UFP
JEDEC Code	—
EIAJ Code	SC-79
Weight (g)	0.0016