
HSC277

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

HITACHI

ADE-208-413A (Z)

Rev. 1
Oct. 2000

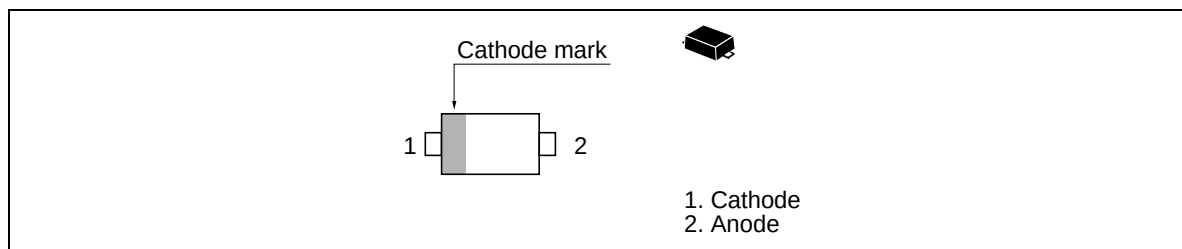
Features

- 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

Outline



HSC277

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	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

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	35	—	—	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	Ω	$I_F = 2 \text{ mA}$, $f = 100 \text{ MHz}$

Main Characteristic

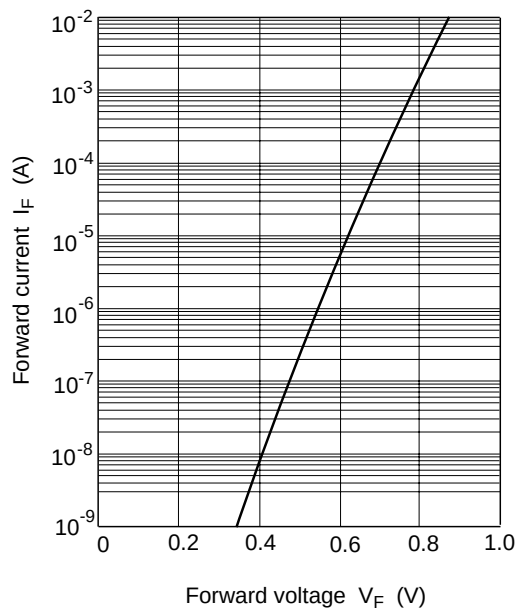


Fig.1 Forward current Vs. Forward voltage

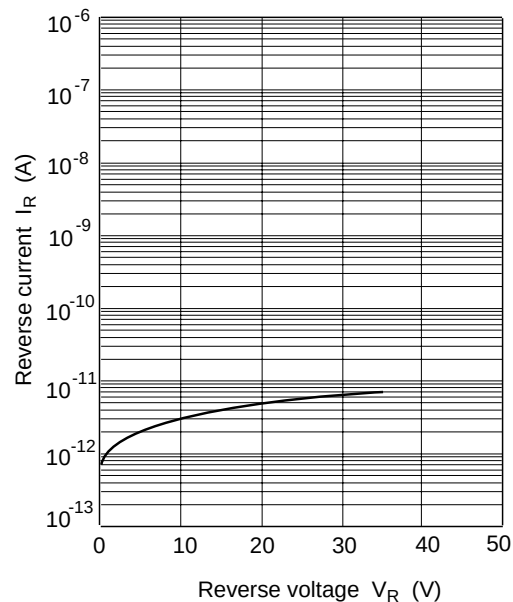


Fig.2 Reverse current Vs. Reverse voltage

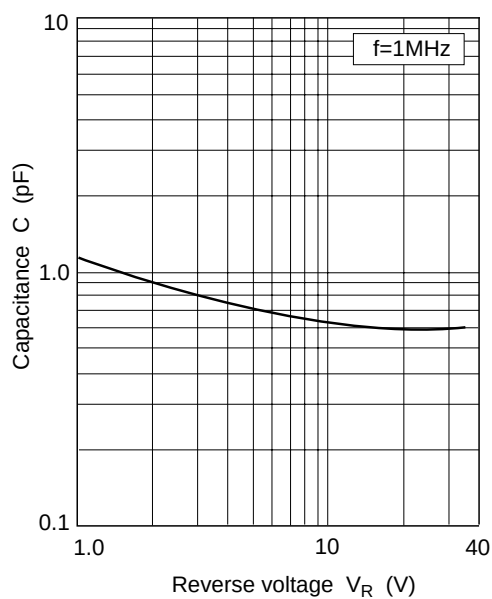


Fig.3 Capacitance Vs. Reverse voltage

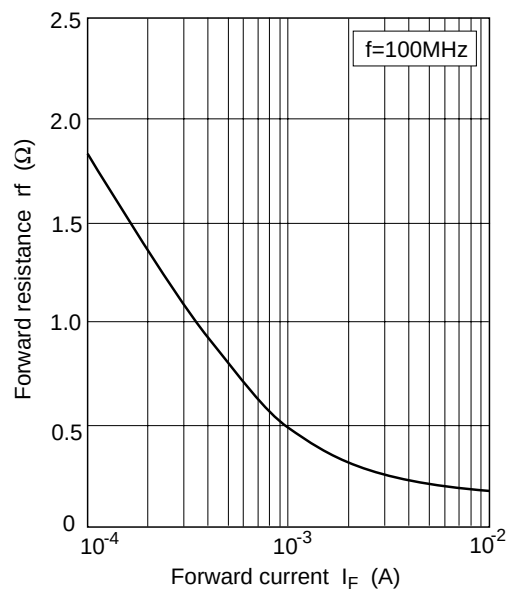
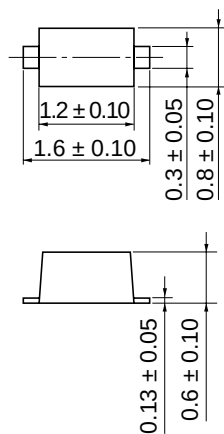


Fig.4 Forward resistance Vs. Forward current

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Package Dimensions

Unit: mm



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

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