

# HSC276

Silicon Schottky Barrier Diode for Mixer

# HITACHI

ADE-208-421A(Z)

Rev 1

Dec. 1998

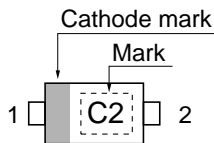
## Features

- High forward current, Low capacitance.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HSC276	C2	UFP

## Outline



1. Cathode
2. Anode

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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	3	V
Average rectified current	$I_O$	30	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	$V_R$	3	—	—	V	$I_R = 1 \text{ mA}$
Reverse current	$I_R$	—	—	50	$\mu\text{A}$	$V_R = 0.5\text{V}$
Forward current	$I_F$	35	—	—	mA	$V_F = 0.5\text{V}$
Capacitance	C	—	—	0.85	pF	$V_R = 0.5\text{V}, f = 1 \text{ MHz}$
ESD-Capability <sup>*1</sup>	—	30	—	—	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ;  $I_R \geq 100\mu\text{A}$  at  $V_R = 0.5 \text{ V}$

Main Characteristic

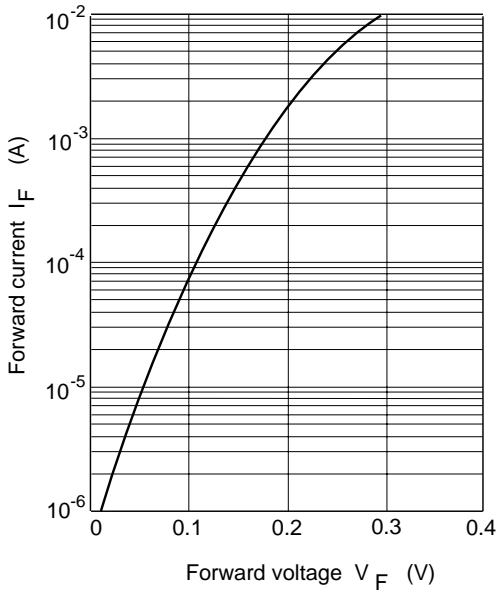


Fig.1 Forward current Vs. Forward voltage

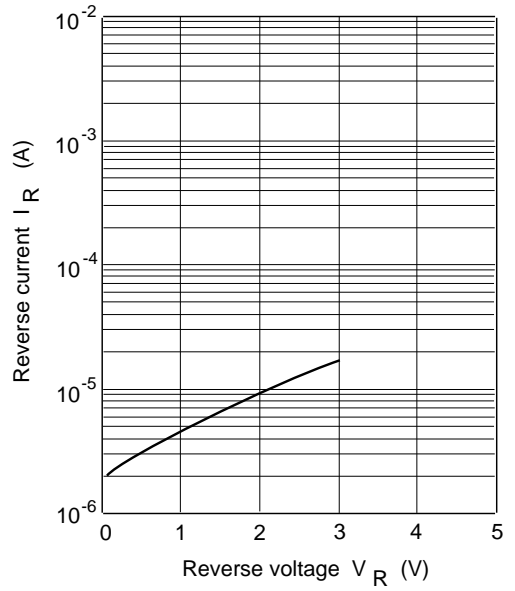


Fig.2 Reverse current Vs. Reverse voltage

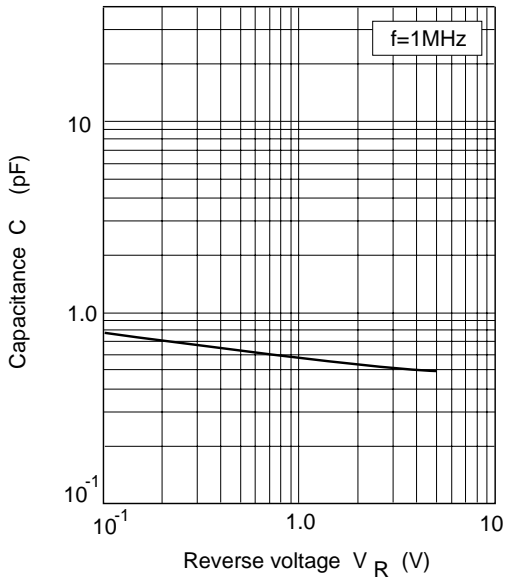
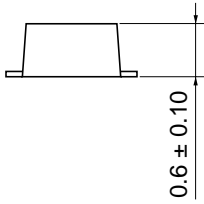
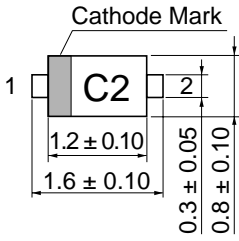


Fig.3 Capacitance Vs. Reverse voltage

## Package Dimensions

Unit : mm



1. Cathode
2. Anode

Hitachi Code	<i>UFP</i>
JEDECCode	—
EIAJCode	SC-79
Weight(g)	0.0016

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