

# HVC372B

Variable Capacitance Diode for VCO

# HITACHI

ADE-208-497(Z)

Rev 0

February 1997

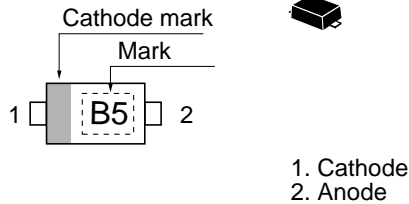
## Features

- High capacitance ratio. ( $n = 2.00$  min)
- Good linearity of C-V curve.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVC372B	B5	UFP

## Outline



# HVC372B

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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	15	V
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 current	$I_{R1}$	—	—	10	nA	$V_R = 15V$
	$I_{R2}$	—	—	100		$V_R = 15V, T_a = 60\text{ °C}$
Capacitance	$C_1$	15.0	—	17.0	pF	$V_R = 1V, f = 1\text{ MHz}$
	$C_4$	7.00	—	8.50		$V_R = 4V, f = 1\text{ MHz}$
Capacitance ratio	n	2.00	—	—	—	$C_1 / C_4$
Series resistance	$r_s$	—	—	0.4	$\Omega$	$V_R = 1V, f = 470\text{ MHz}$

Main Characteristic

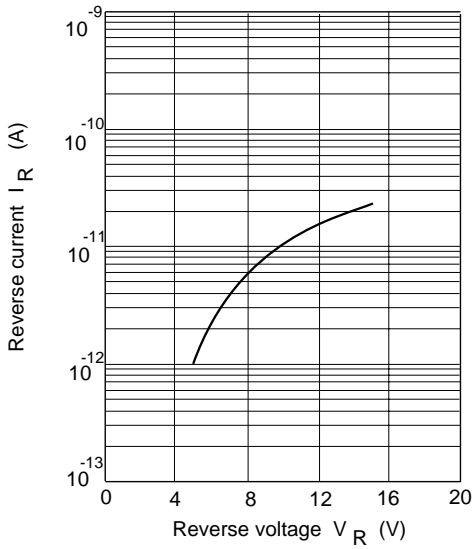


Fig.1 Reverse current Vs. Reverse voltage

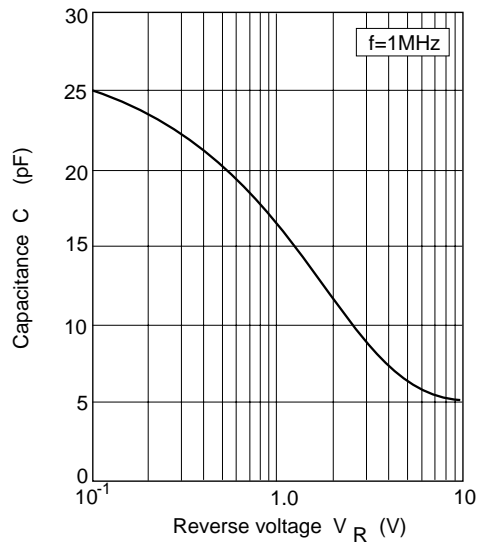


Fig.2 Capacitance Vs. Reverse voltage

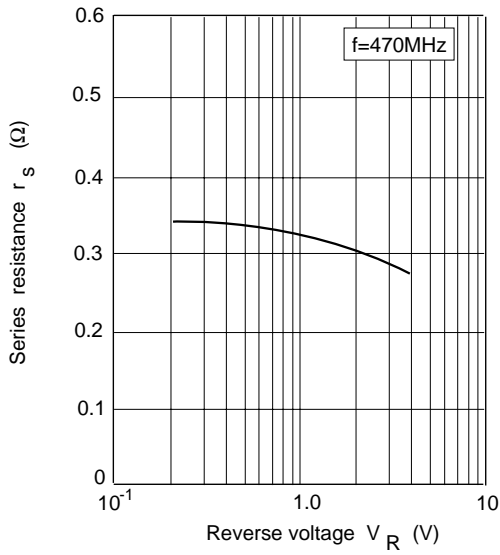


Fig.3 Series resistance Vs. Reverse voltage

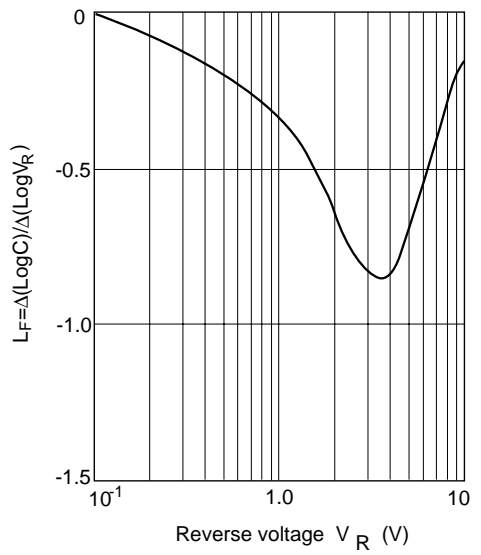
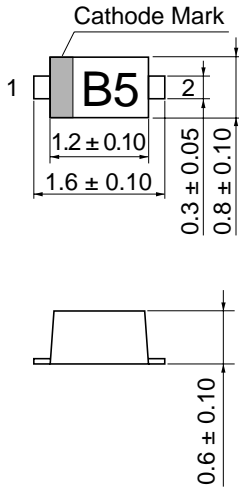


Fig.4 Linearity factor Vs. Reverse voltage

# HVC372B

## Package Dimensions

Unit : mm



1. Cathode
2. Anode

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

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