

---

# HVC369B

Variable Capacitance Diode for VCO

# HITACHI

ADE-208-446A(Z)

Rev 1

July 1996

---

## Features

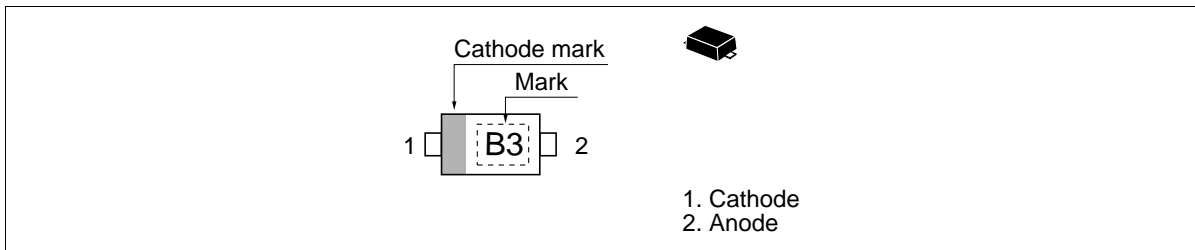
- Low capacitance and to be usable at GHz.
- High capacitance ratio. ( $n = 2.3$  min)
- Low series resistance. ( $r_s = 0.5\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVC369B	B3	UFP

---

## Outline



---

## HVC369B

---

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

Item	Symbol	Value	Unit
Reverse voltage	VR	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	IR1	∅	∅	10	nA	VR = 15V
	IR2	∅	∅	100		VR = 15V, Ta = 60 °C
Capacitance	C1	4.65	∅	5.15	pF	VR = 1V, f = 1 MHz
	C4	1.85	∅	2.15		VR = 4V, f = 1 MHz
Capacitance ratio	n	2.3	∅	∅	∅	C1/ C4
Series resistance	rs	∅	∅	0.5	Ω	VR = 1V, f = 470 MHz

Main Characteristic

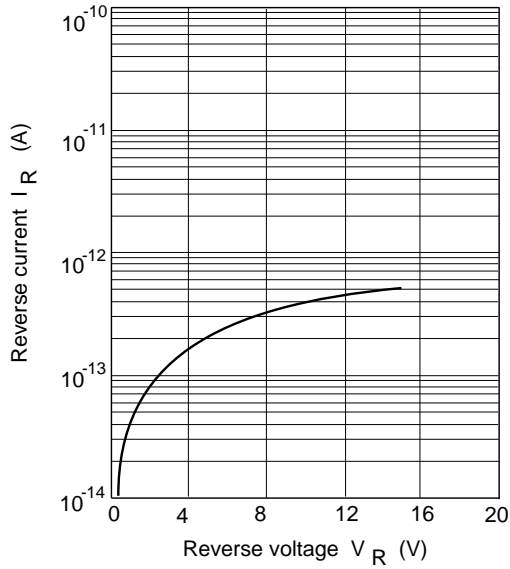


Fig.1 Reverse current Vs. Reverse voltage

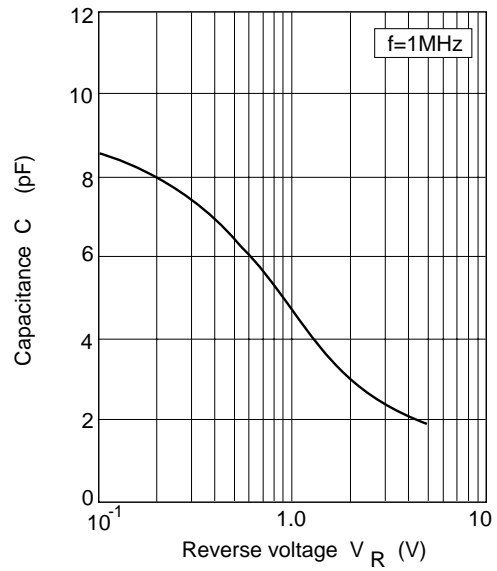


Fig.2 Capacitance Vs. Reverse voltage

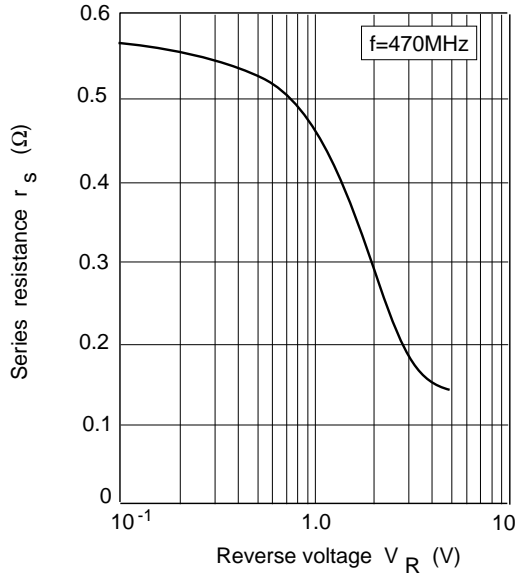


Fig.3 Series resistance Vs. Reverse voltage

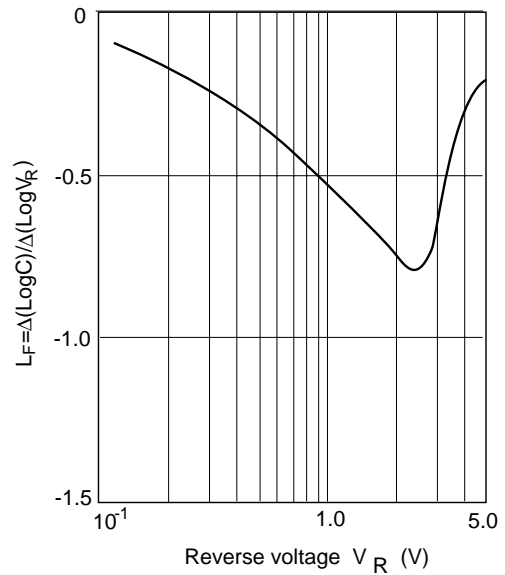


Fig.4 Linearity factor Vs. Reverse voltage

# HVC369B

## Package Dimensions

Unit : mm

