

# **HVC375B**

## Variable Capacitance Diode for VCO

REJ03G0064-0100Z

(Previous: ADE-208-625)

Rev.1.00 Jul.24.2003

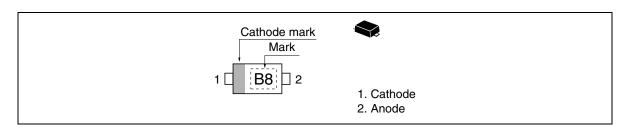
#### **Features**

- Narrow terminal Capacitance deviation.
- Low series resistance.  $(r_s = 1.1 \Omega \text{ max})$
- Good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

### **Ordering Information**

Type No.	Laser Mark	Package Code
HVC375B	B8	UFP

#### **Pin Arrangement**



## **Absolute Maximum Ratings**

 $(Ta = 25^{\circ}C)$ 

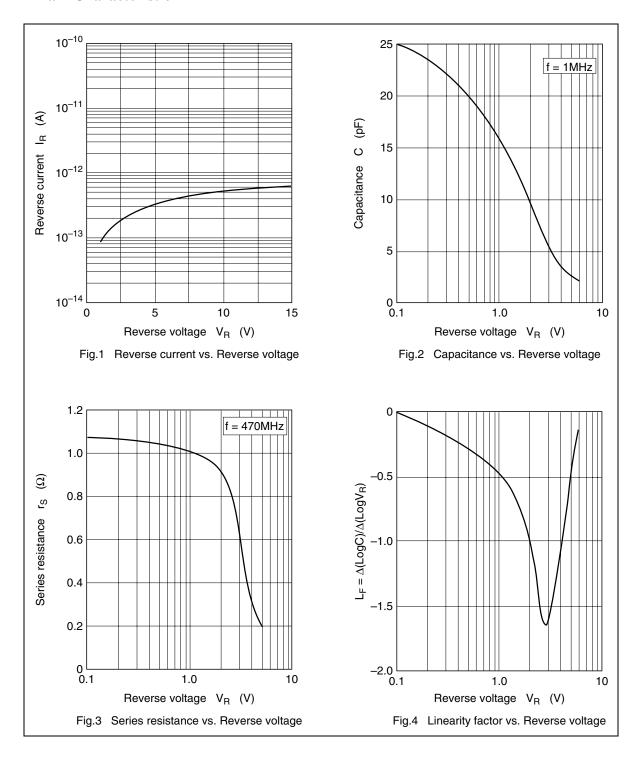
Item	Symbol	Value	Unit
Reverse voltage	$V_{R}$	10	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−55 to +125	°C

### **Electrical Characteristics**

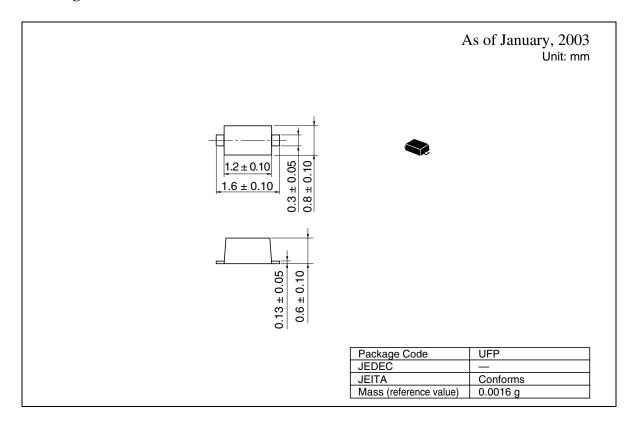
 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse current	I <sub>R1</sub>	_	_	10	nA	V <sub>R</sub> = 10 V
	I <sub>R2</sub>	_	_	100	_	V <sub>R</sub> = 10 V, Ta = 60°C
Capacitance	C <sub>1</sub>	15.0	_	16.5	pF	V <sub>R</sub> = 1 V, f = 1 MHz
	C <sub>3</sub>	5.0	_	6.0	_	V <sub>R</sub> = 3 V, f = 1 MHz
	C <sub>4</sub>	3.3	_	4.0	_	V <sub>R</sub> = 4 V, f = 1 MHz
Capacitance ratio	n	4.0	_	_	_	C <sub>1</sub> / C <sub>4</sub>
Series resistance	r <sub>s</sub>			1.1	Ω	V <sub>R</sub> = 2 V, f = 470 MHz

#### **Main Characteristic**



## **Package Dimensions**



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