

# HVC357

## Variable Capacitance Diode for VCO

# HITACHI

 Rev. 0  
 Nov. 1995

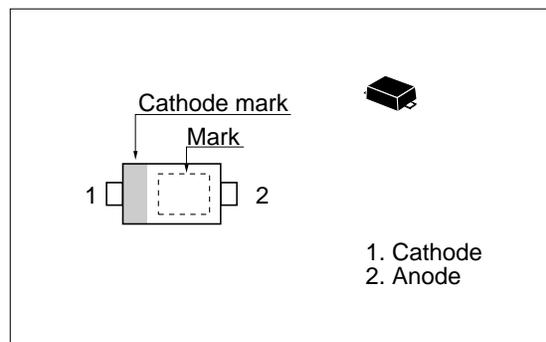
### Features

- Low series resistance. ( $r_s=0.35\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HVC357	J	UFP

### Outline



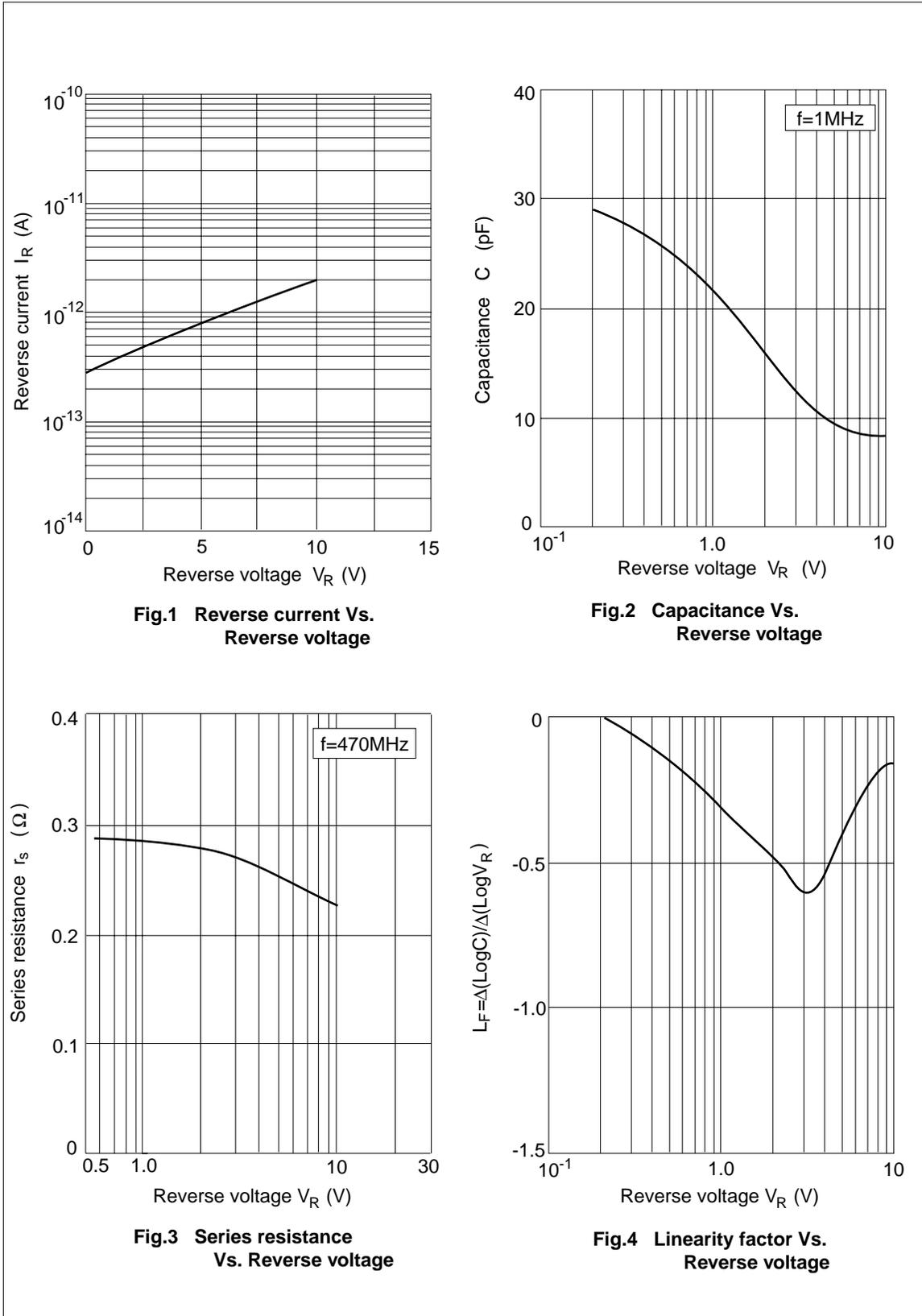
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	V
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +125	$^\circ\text{C}$

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

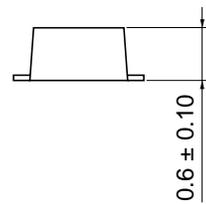
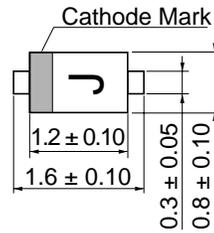
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_{R1}$	—	—	10	nA	$V_R = 10\text{ V}$
	$I_{R2}$	—	—	100		$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	$C_1$	19.5	—	23.5	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	$C_2$	14.3	—	17.6		$V_R = 2\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	$n$	1.3	—	—	—	$C_1 / C_2$
Series resistance	$r_s$	—	—	0.35	$\Omega$	$V_R = 1\text{ V}, f = 470\text{ MHz}$

## HVC357



### Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	UFP
JEDEC Code	—
EIAJ Code	SC-79
Weight (g)	0.0016