

ADE-208-415(Z)

# HVC351

## Variable Capacitance Diode for VCO

# HITACHI

Rev. 0  
Nov. 1995

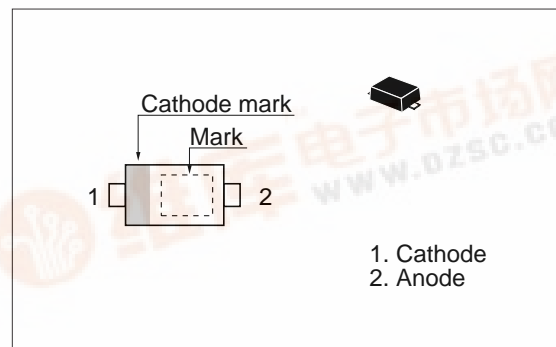
### Features

- 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
HVC351	6	UFP

### Outline



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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	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	$V_R = 10\text{ V}$
	$I_{R2}$	—	—	100		$V_R = 10\text{ V}, T_a = 60\text{ °C}$
Capacitance	$C_2$	14.0	—	16.0	pF	$V_R = 2\text{ V}, f = 1\text{ MHz}$
	$C_{10}$	5.0	—	6.5		$V_R = 10\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	2.00	—	—	—	$C_2 / C_{10}$
Series resistance	$r_s$	—	—	0.35	$\Omega$	$V_R = 1\text{ V}, f = 470\text{ MHz}$

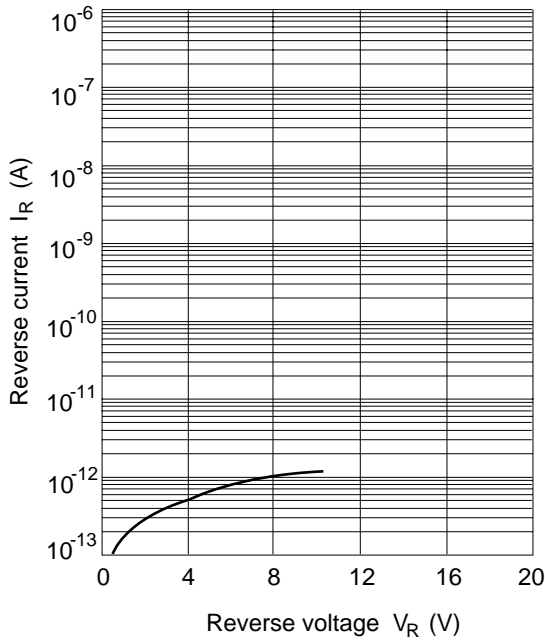


Fig.1 Reverse current Vs. Reverse voltage

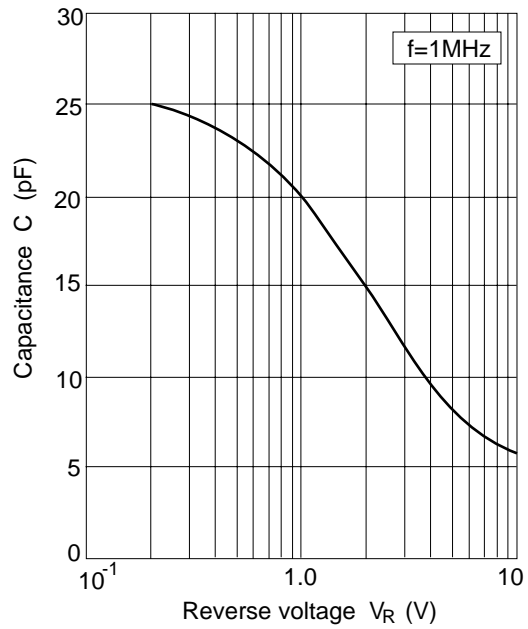


Fig.2 Capacitance Vs. Reverse voltage

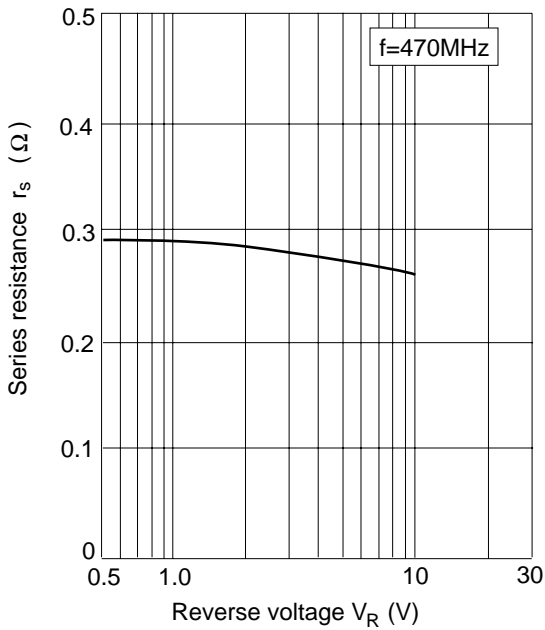


Fig.3 Series resistance Vs. Reverse voltage

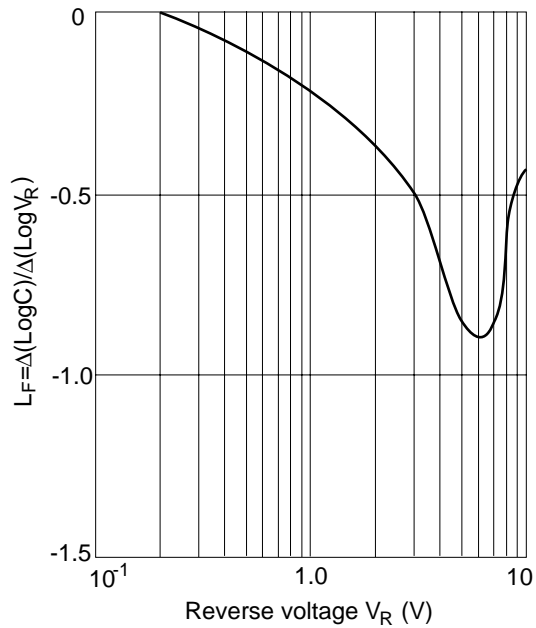
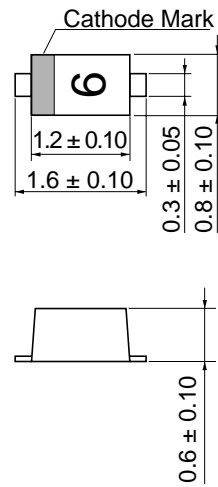


Fig.4 Linearity factor Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

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