
HVC386B

Variable Capacitance Diode for VCXO

HITACHI

ADE-208-829(Z)

Rev. 0
Nov. 1999

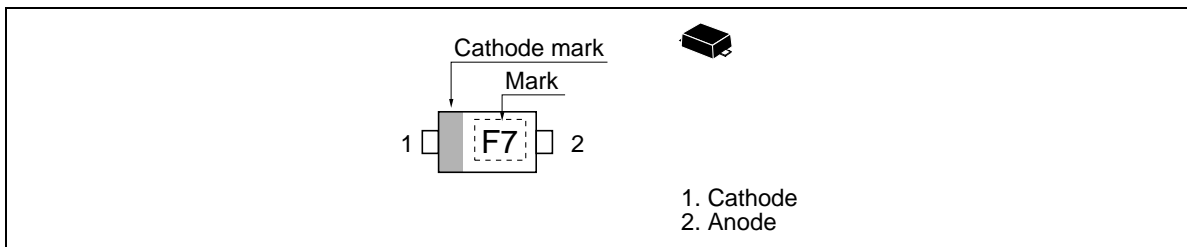
Features

- High capacitance ratio. ($n = 1.80$ min)
- Low series resistance. ($r_s = 0.85\Omega$ max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC386B	F7	UFP

Outline



HVC386B

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	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	I_{R1}	—	—	10	nA	$V_R = 15V$
	I_{R2}	—	—	100		$V_R = 15V, Ta = 60°C$
Capacitance	C_1	43.0	—	49.0	pF	$V_R = 1V, f = 1\text{ MHz}$
	C_4	18.5	—	25.5		$V_R = 4V, f = 1\text{ MHz}$
Capacitance ratio	n	1.80	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	0.85	Ω	$V_R = 5V, f = 470\text{ MHz}$

Main Characteristic

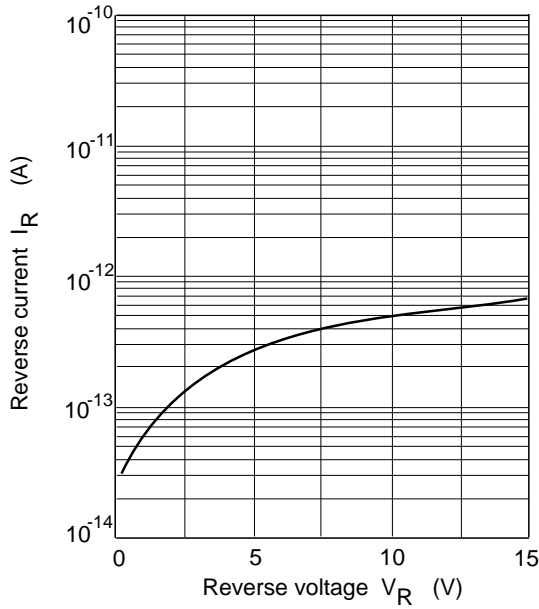


Fig.1 Reverse current Vs. Reverse voltage

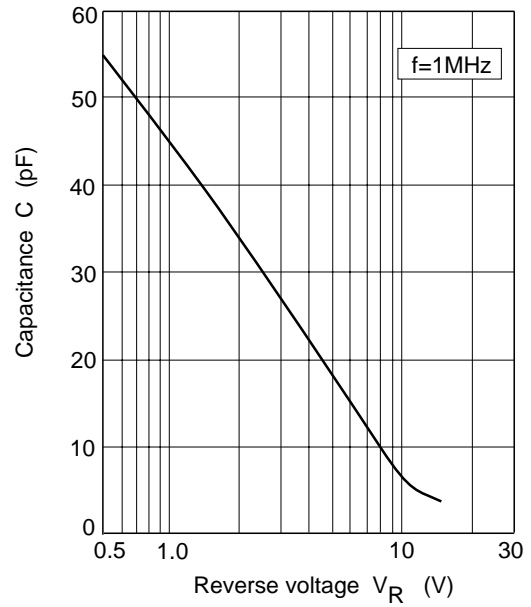


Fig.2 Capacitance Vs. Reverse voltage

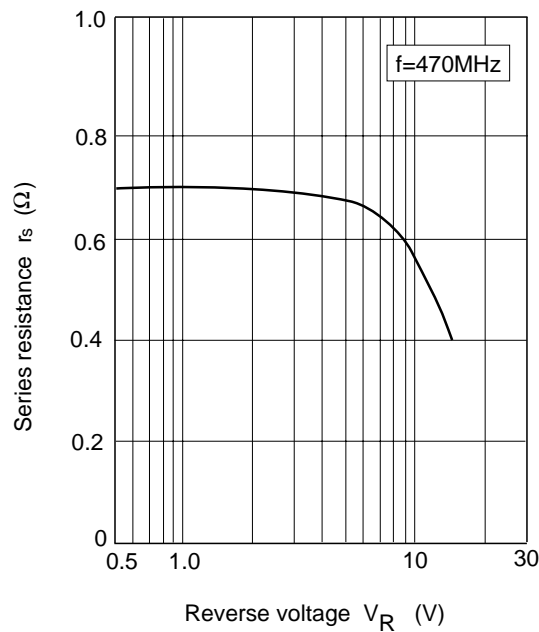


Fig.3 Series resistance Vs. Reverse voltage

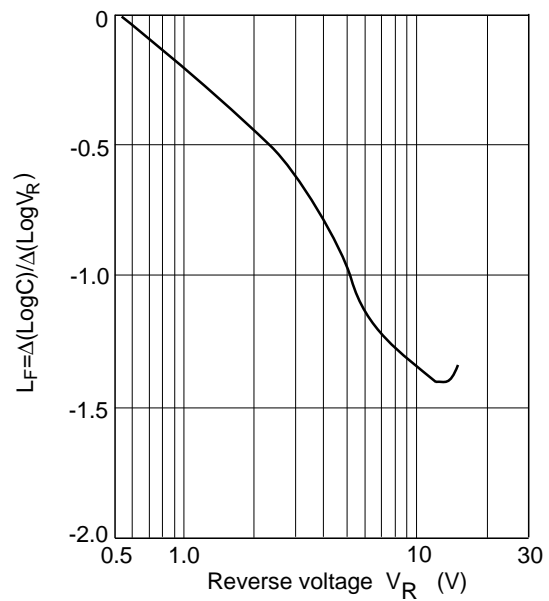
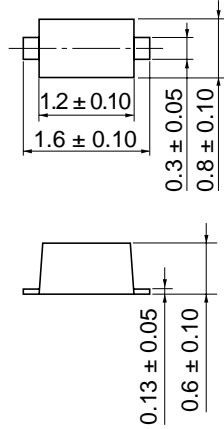


Fig.4 L_F Vs. Reverse voltage

HVC386B

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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