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## HVC358B

Variable Capacitance Diode for VCO

# HITACHI

ADE-208-418(Z)

Rev 0

July 1996

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### Features

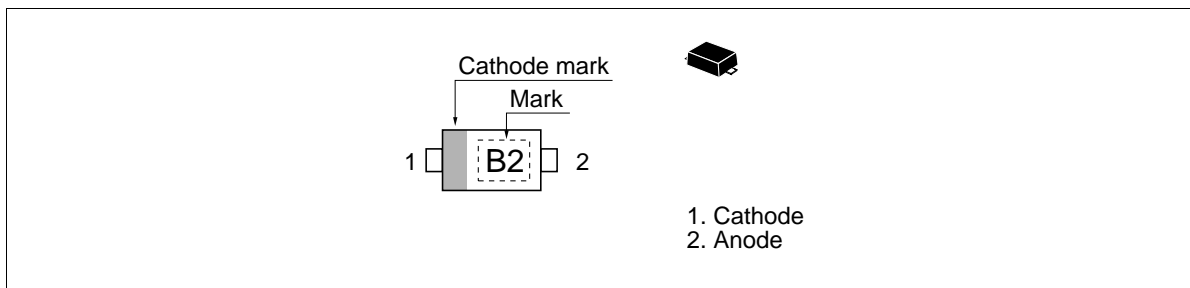
- High capacitance ratio. ( $n = 2.20$ .min)
- Low series resistance. ( $r_s = 0.4\Omega$ max)
- Good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HVC358B	B2	UFP

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### Outline



## HVC358B

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

Item	Symbol	Value	Unit
Reverse voltage	VR	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55~+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	19.5	∅	21.0	pF	VR = 1V, f = 1 MHz
	C4	8.00	∅	9.30		VR = 4V, f = 1 MHz
Capacitance ratio	n	2.20	∅	∅	∅	C1 / C4
Series resistance	rs	∅	∅	0.4	Ω	VR = 1V, f = 470 MHz

### Main Characteristic

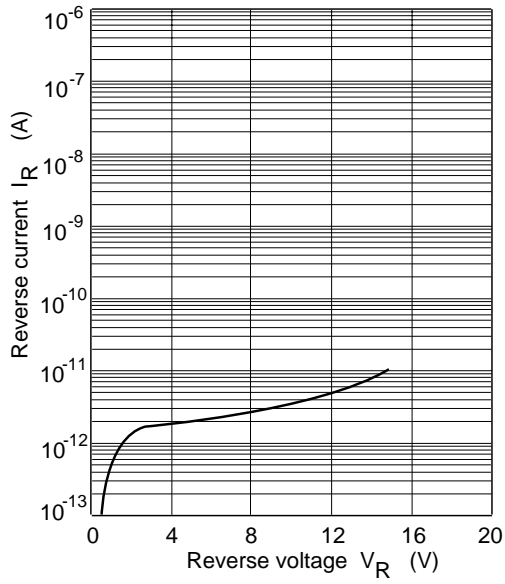


Fig.1 Reverse current Vs. Reverse voltage

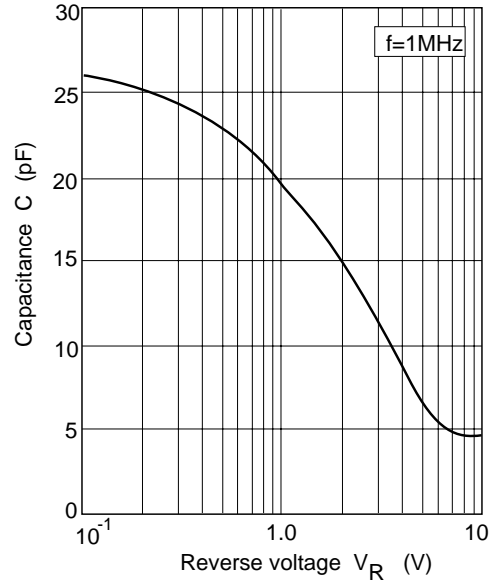


Fig.2 Capacitance Vs. Reverse voltage

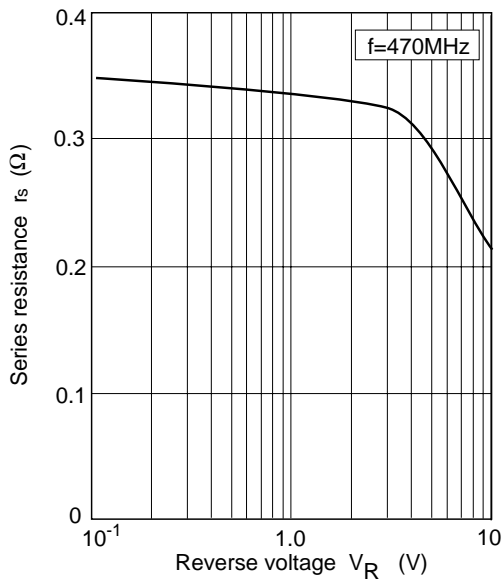


Fig.3 Series resistance Vs. Reverse voltage

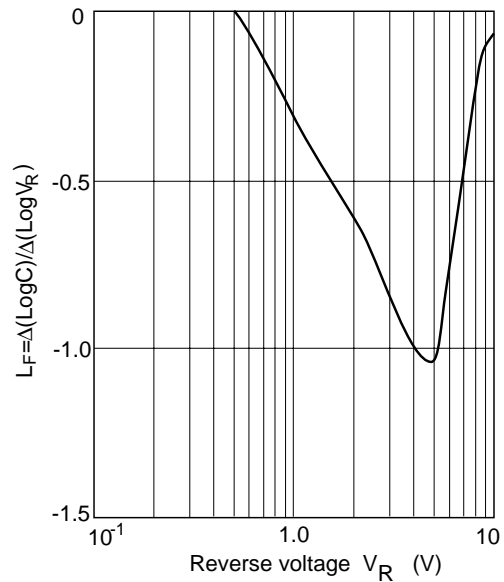


Fig.4  $L_F$  Vs. Reverse voltage

## HVC358B

### Package Dimensions

Unit : mm

