

HVC365

Variable Capacitance Diode for VCXO

HITACHI

ADE-208-428A(Z)
Rev 1
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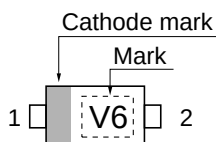
Features

- High capacitance ratio and good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC365	V6	UFP

Outline



1. Cathode
2. Anode

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	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	$V_R = 10V$
	I_{R2}	—	—	100		$V_R = 10V, T_a = 60^{\circ}C$
Capacitance	C_1	27.05	—	28.55	pF	$V_R = 1V, f = 1\text{ MHz}$
	C_4	6.05	—	7.55		$V_R = 4V, f = 1\text{ MHz}$
Capacitance ratio	n	3.0	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	1.5	Ω	$V_R = 4V, f = 100\text{ MHz}$
ESD-Capability ^{*1}	—	80	—	—	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; $IR \geq 20nA$ at $VR = 10\text{ V}$

Main Characteristic

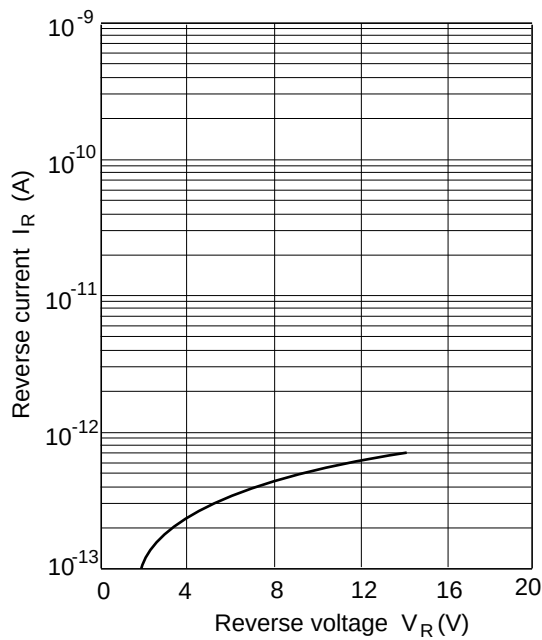


Fig.1 Reverse current Vs. Reverse voltage

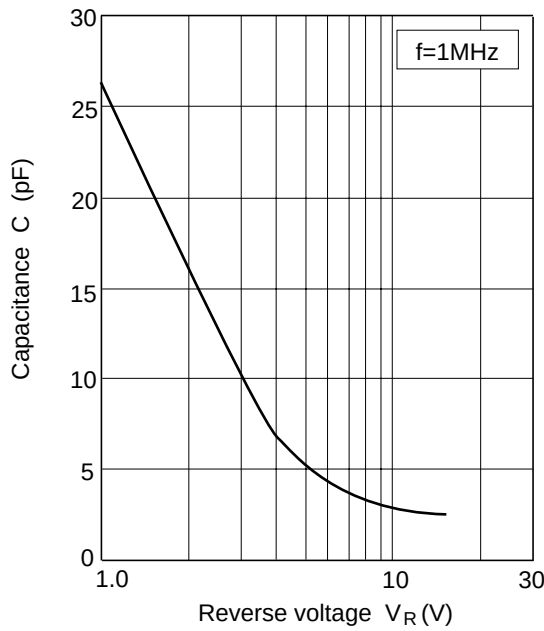
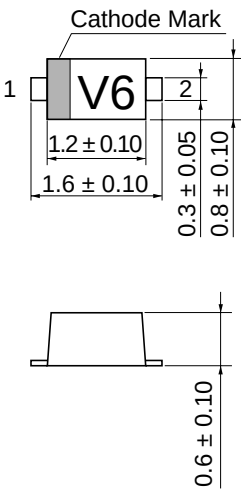


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



- 1. Cathode
- 2. Anode

Hitachi Code	<i>UFP</i>
JEDECCode	—
EIAJCode	SC-79
Weight(g)	0.0016

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