HVC359

Variable Capacitance Diode for VCXO

HITACHI

ADE-208-419A(Z)
Rev 0
Dec. 1998

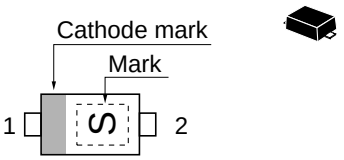
Features

- High capacitance ratio and good C-V linearity.
- To be usable at low voltage.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC359	S	UFP

Outline



1. Cathode
2. Anode

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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 = 10V
	I_{R2}	—	—	100		V_R = 10V, Ta = 60 °C
Capacitance	C_1	24.8	—	29.8	pF	V_R = 1V, f = 1 MHz
	C_4	6.0	—	8.3		V_R = 4V, f = 1 MHz
Capacitance ratio	n	3.0	—	—	—	C_1/C_4
Series resistance	r_s	—	—	1.5	Ω	V_R = 4V, f = 100 MHz
ESD-Capability[*1]	Å\	80	—	—	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; IR ≥ 20nA at VR =10 V

Main Characteristic

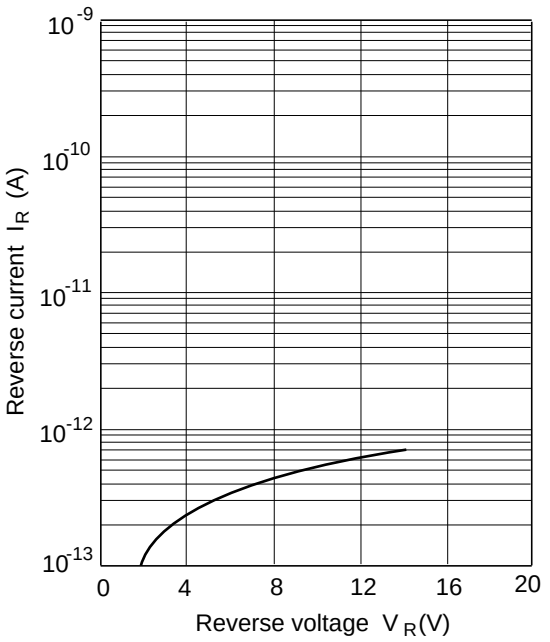


Fig.1 Reverse current Vs. Reverse voltage

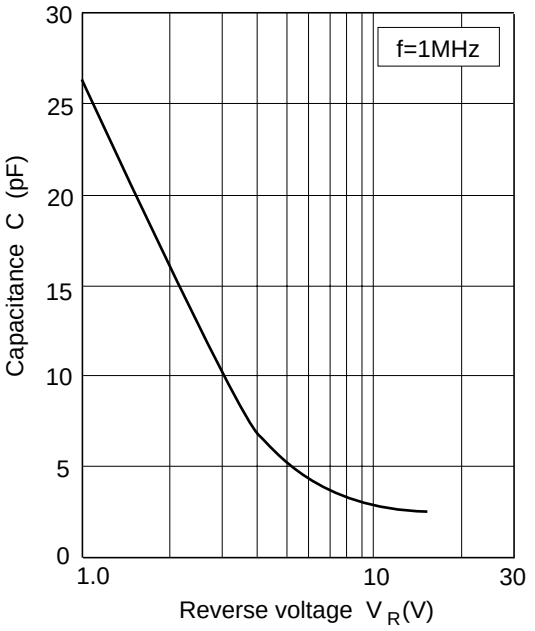
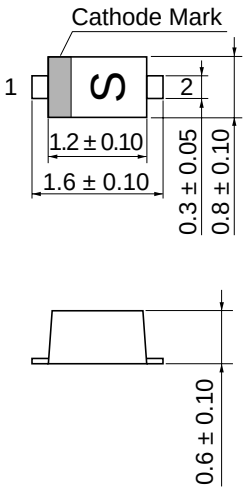


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



1. Cathode
2. Anode

Hitachi Code	*UFP*
JEDECCode	—
EIAJCode	SC-79
Weight(g)	0.0016

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