HVC362

Variable Capacitance Diode for VCO

HITACHI

ADE-208-456(Z)
Rev 0

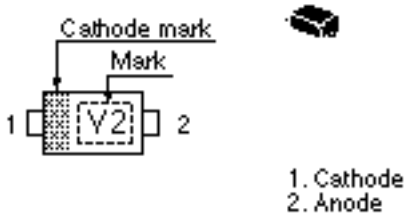
Features

- High capacitance ratio. (n = 3.0.min)
- Good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC362	V2	UFP

Outline



Hitachi semiconductor

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	41.6	—	49.9	pF	V_R = 1V, f = 1 MHz
	C_4	10.1	—	14.8		V_R = 4V, f = 1 MHz
Capacitance ratio	n	3.0	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	2.0	Ω	V_R = 4V, f = 100 MHz
ESD-Capability[*1]	—	80	—	—	V	*C = 200pF,Both forward and reversedirection 1 pulse.

Note: Failure criterion ; $I_R \geq 20nA$ at V_R = 10 V

Main Characteristic

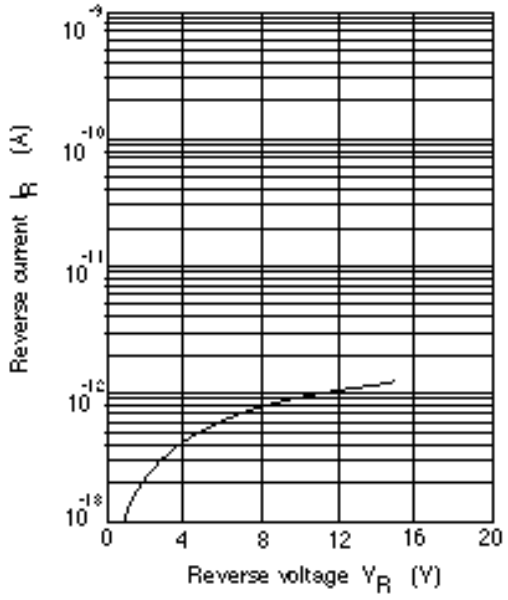


Fig.1 Reverse current Vs. Reverse voltage

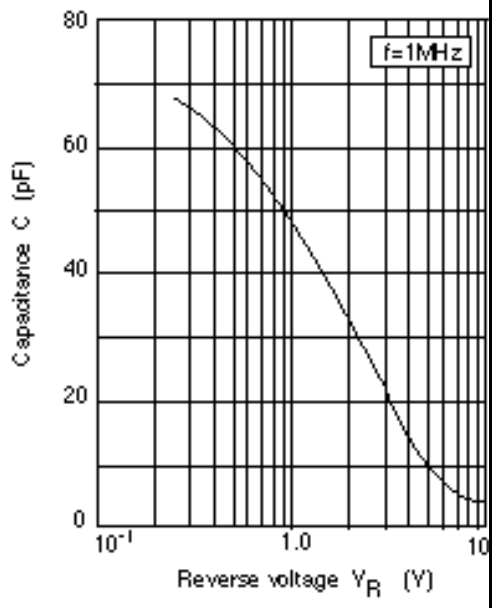


Fig.2 Capacitance Vs. Reverse voltage

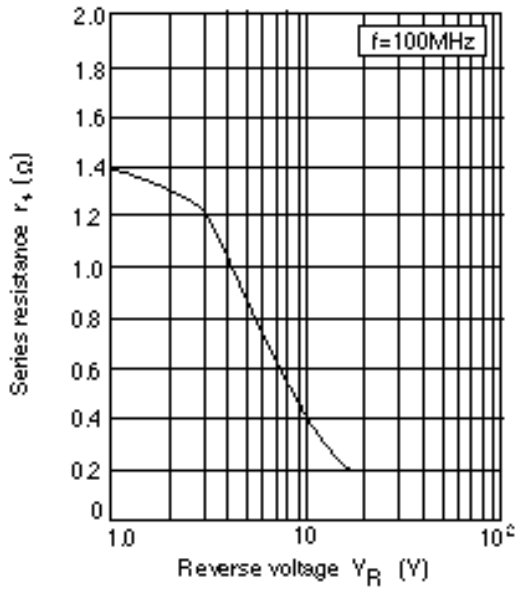


Fig.3 Series resistance Vs. Reverse voltage

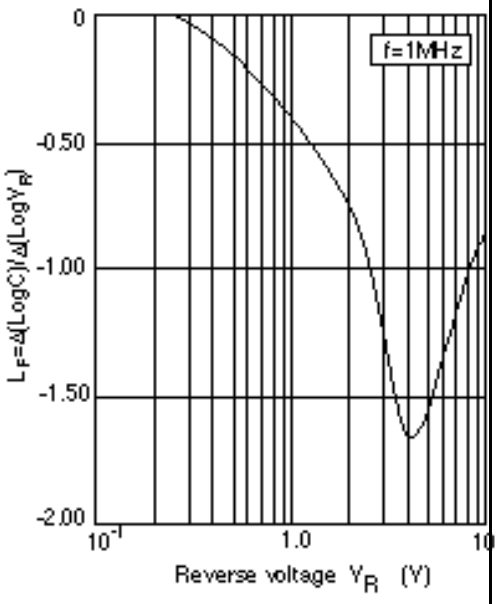
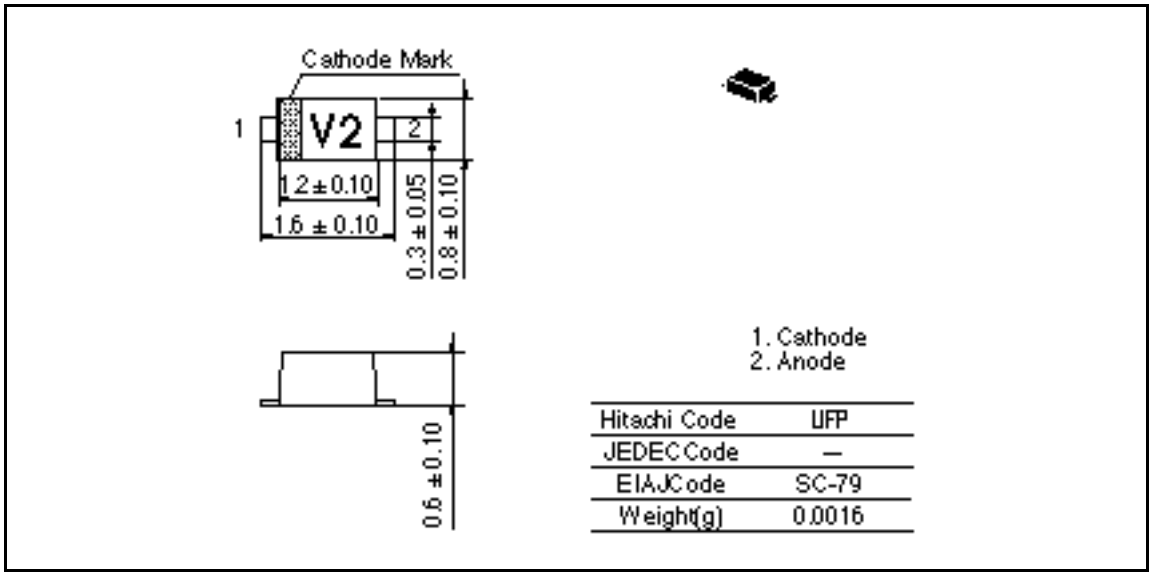


Fig.4 L_F Vs. Reverse voltage

Package Dimensions

Unit : mm



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