HVC357

Variable Capacitance Diode for VCO

HITACHI

ADE-208-417 (Z)
Rev. 0
Nov. 1995

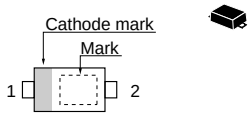
Features

- Low series resistance. (r_s = 0.35Ωmax)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC357	J	UFP

Outline



1. Cathode
2. Anode

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	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	19.5	—	23.5	pF	V_R = 1V, f = 1MHz
	C_2	14.3	—	17.6		V_R = 2V, f = 1MHz
Capacitance ratio	n	1.3	—	—	—	C_1/C_2
Series resistance	r_s	—	—	0.35	Ω	V_R = 1V, f = 470MHz

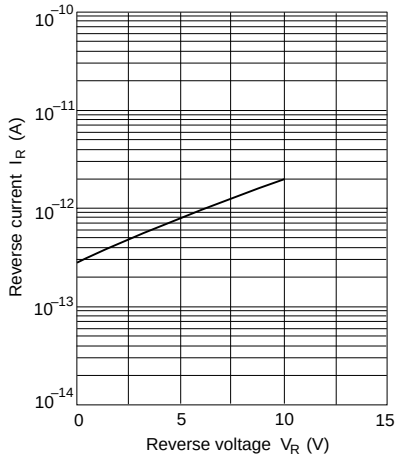


Fig.1 Reverse current Vs. Reverse voltage

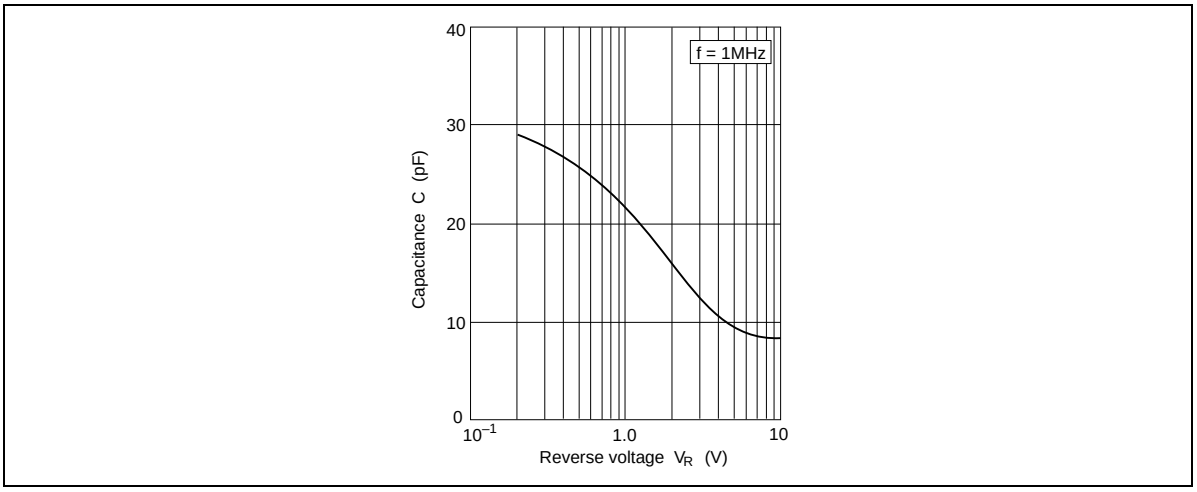


Fig.2 Capacitance Vs. Reverse voltage

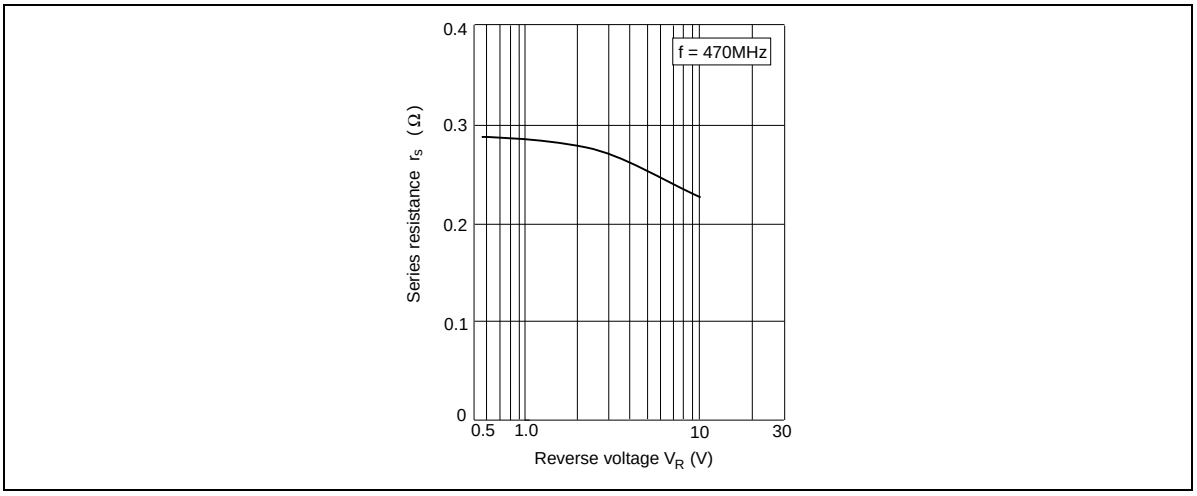


Fig.3 Series resistance Vs. Reverse voltage

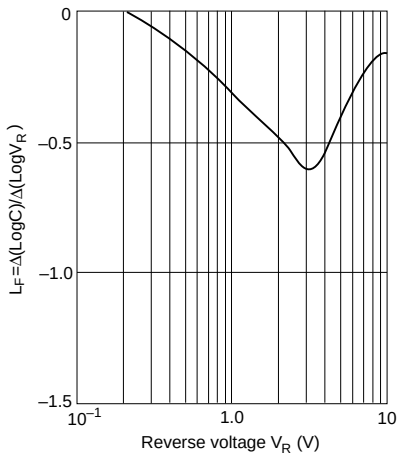
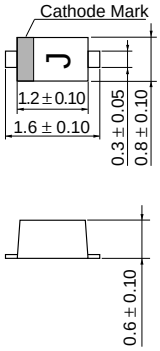


Fig.4 Linearity factor Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

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