

HVC308A

Variable Capacitance Diode for TV tuner

HITACHI

ADE-208-411A(Z)

Rev 1

Dec. 1998

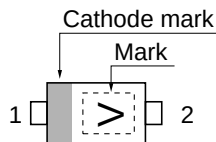
Features

- Low series resistance. ($r_s=0.95\Omega_{\text{max}}$)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC308A	V	UFP

Outline



1. Cathode
2. Anode

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V _R	35	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 = 30V
	I _{R2}	—	—	100		V _R = 30V, Ta = 60 °C
Capacitance	C ₂	13.7	—	15.9	pF	V _R = 2V, f = 1 MHz
	C ₂₀	1.65	—	2.06		V _R = 20V, f = 1 MHz
Capacitance ratio	n	7.12	—	—	—	C ₂ / C ₂₀
Series resistance	r _s	—	—	0.95	Ω	V _R = 5V, f = 470 MHz

Main Characteristic

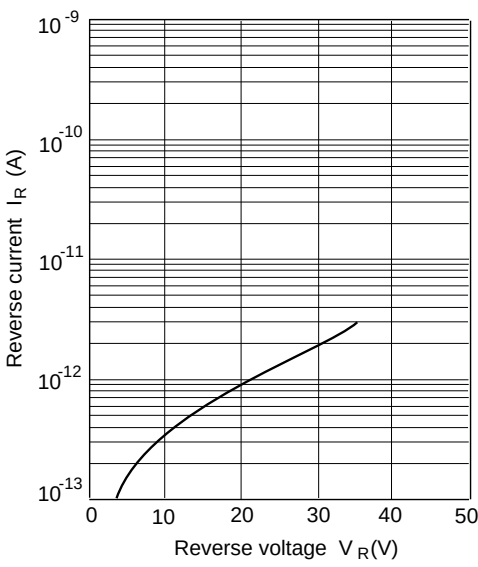


Fig.1 Reverse current Vs. Reverse voltage

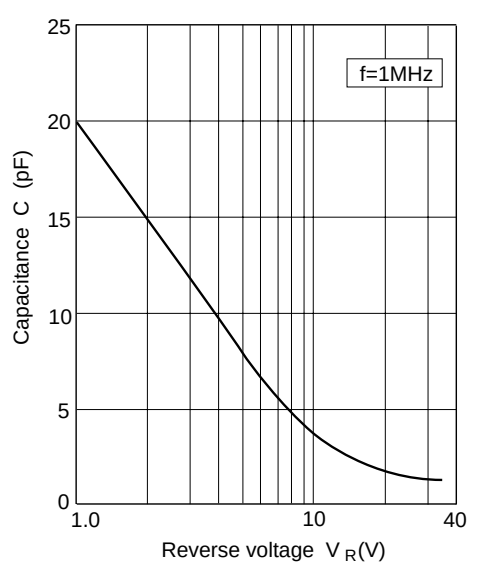


Fig.2 Capacitance Vs. Reverse voltage

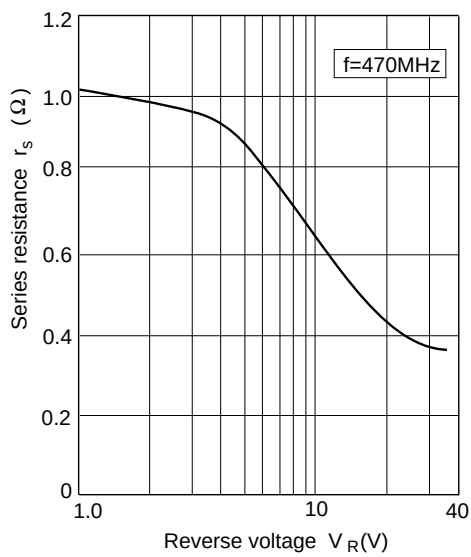


Fig.3 Series resistance Vs. Reverse voltage

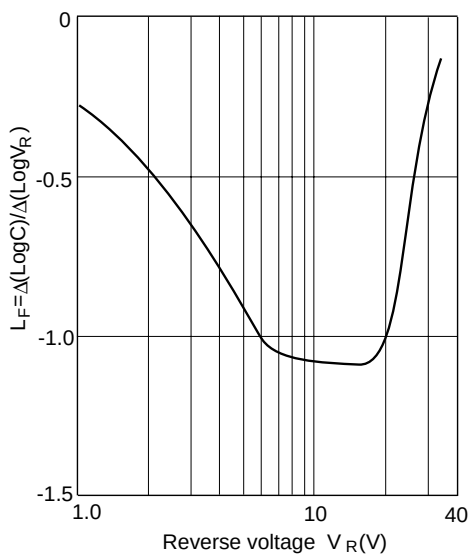
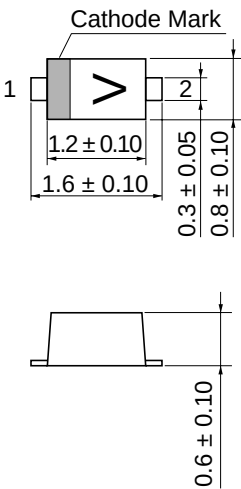


Fig.4 Linearity factor Vs. Reverse voltage

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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