

HVC308A

Variable Capacitance Diode for TV tuner

HITACHI

ADE-208-411A(Z)

Rev 1

Dec. 1998

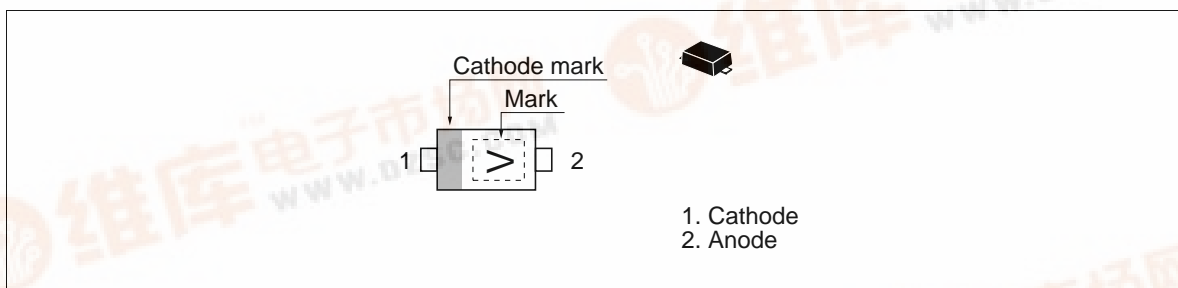
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HVC308A	V	UFP

Outline



HVC308A

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	35	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	$V_R = 30V$
	I_{R2}	—	—	100		$V_R = 30V, T_a = 60\text{ °C}$
Capacitance	C_2	13.7	—	15.9	pF	$V_R = 2V, f = 1\text{ MHz}$
	C_{20}	1.65	—	2.06		$V_R = 20V, f = 1\text{ MHz}$
Capacitance ratio	n	7.12	—	—	—	C_2 / C_{20}
Series resistance	r_s	—	—	0.95	Ω	$V_R = 5V, f = 470\text{ MHz}$

Main Characteristic

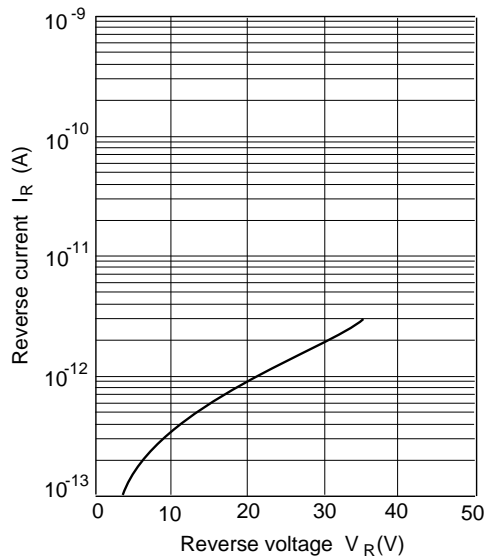


Fig.1 Reverse current Vs. Reverse voltage

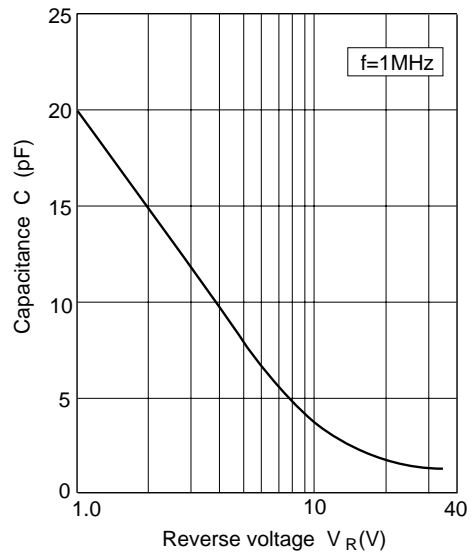


Fig.2 Capacitance Vs. Reverse voltage

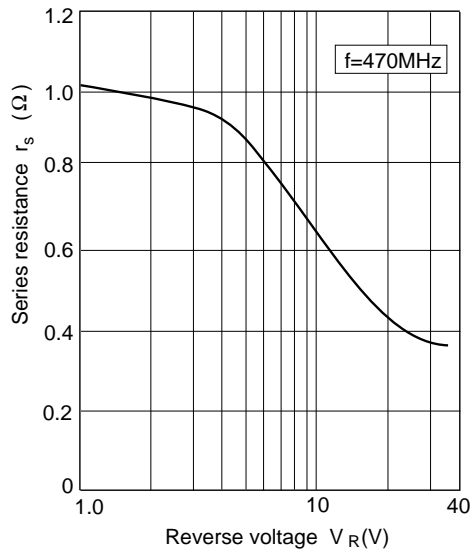


Fig.3 Series resistance Vs. Reverse voltage

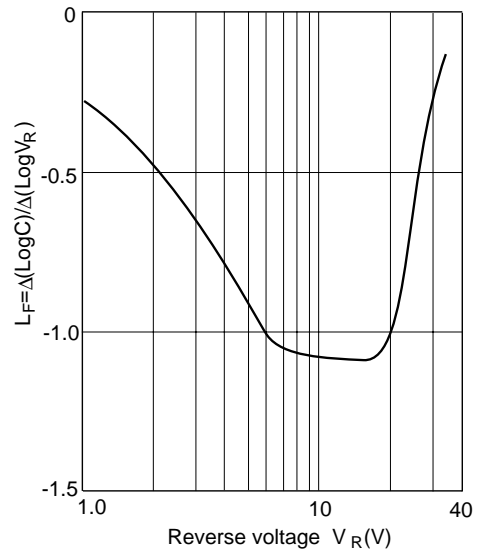
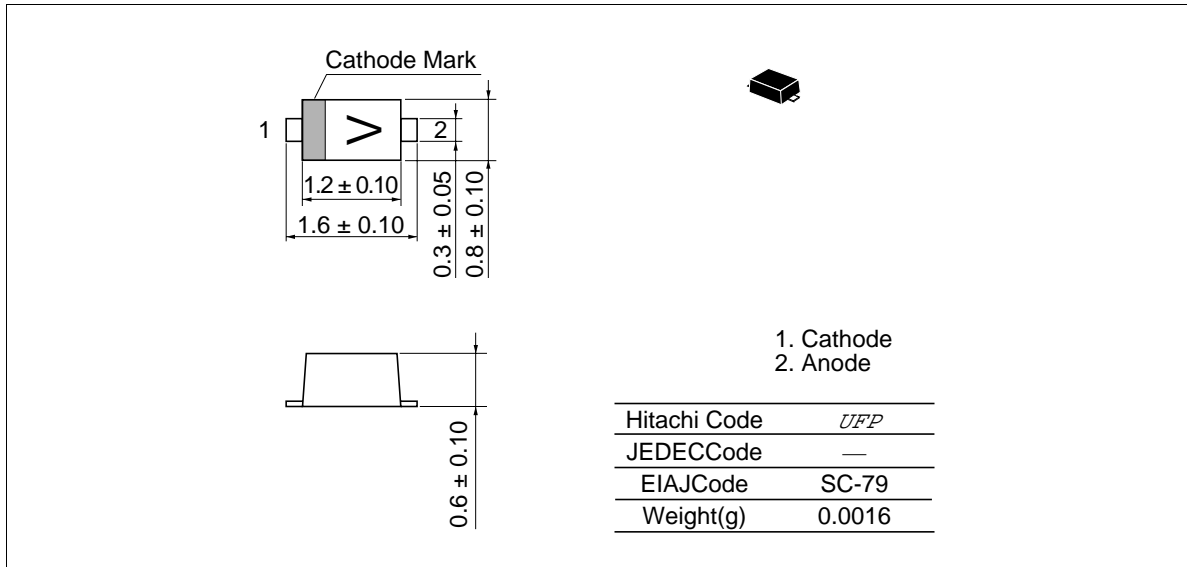


Fig.4 Linearity factor Vs. Reverse voltage

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Package Dimensions

Unit : mm



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