
HVU200A

Variable Capacitance Diode for Electronic Tuning

HITACHI

ADE-208-067D(Z)

Rev 4

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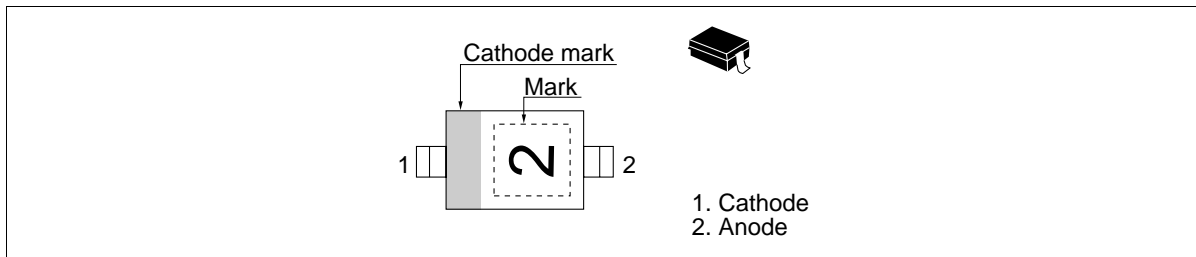
Features

- High capacitance ratio($n=10$ min) and suitable for wide band tuner.
- Ultra small Resin Package (URP) is suitable for surface mount design.
- Low series resistance and good C-V linearity.

Ordering Information

Type No.	Laser Mark	Package Code
HVU200A	2	URP

Outline



HVU200A

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	VR	32	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55~+125	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	IR1	∅	∅	10	nA	VR = 30V
	IR2	∅	∅	100		VR = 30V, Ta = 60 °C
Capacitance	C2	27.7	∅	31.8	pF	VR = 2V, f = 1 MHz
	C25	2.67	∅	3.03		VR = 25V, f = 1 MHz
Capacitance ratio	n	10.0	∅	∅	∅	C2/ C25
Series resistance	rs	∅	∅	0.70	Ω	VR = 5V, f = 470 MHz
Matching error	ΔC/C*1	∅	∅	2.0	%	VR = 2~25V, f = 1 MHz

Note 1. C.C system (Continuous Connected taping system) enable to make any 10 pcs of ΔC/C continuous in a reel , expect extention to another group.
Calculate Matching Error,

(Cmax-Cmin)

$$\Delta C/C = \frac{\text{Cmax-Cmin}}{\text{Cmin}} \times 100 (\%)$$

Main Characteristic

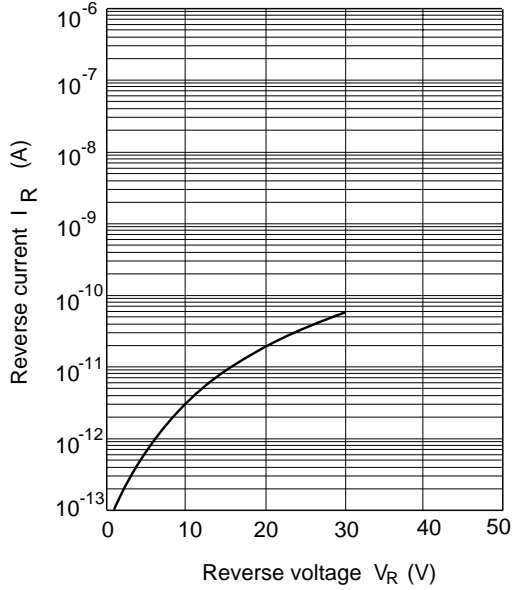


Fig.1 Reverse current Vs. Reverse voltage

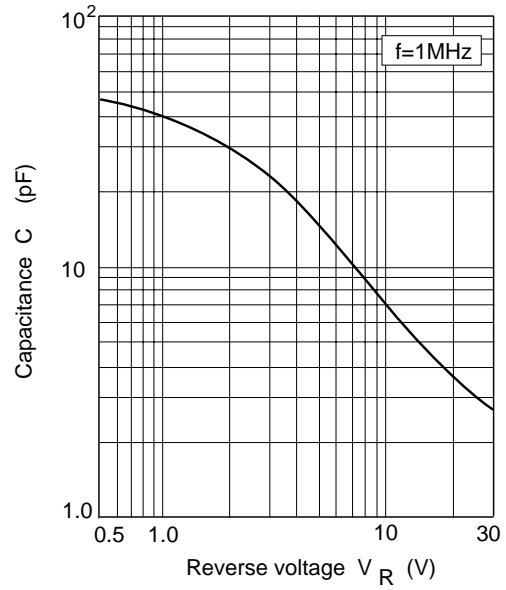


Fig.2 Capacitance Vs. Reverse voltage

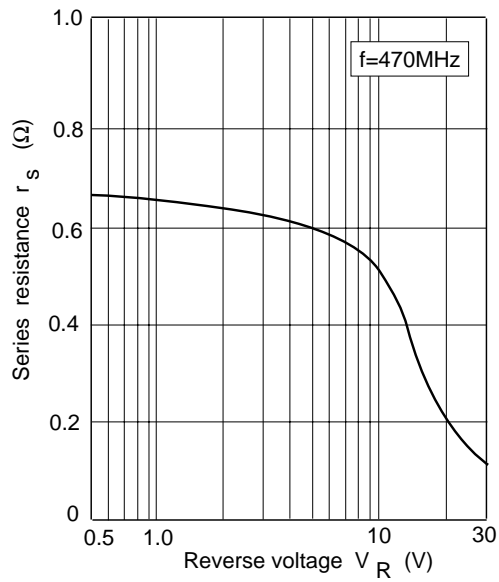


Fig.3 Series resistance Vs. Reverse voltage

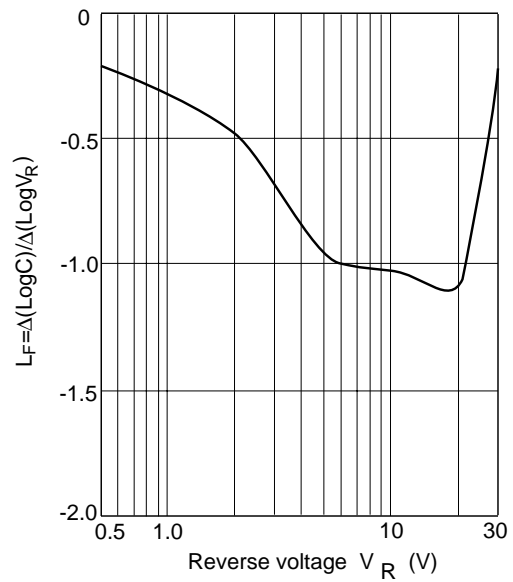


Fig.4 Linearity factor Vs. Reverse voltage

HVU200A

Package Dimensions

Unit : mm

