

# **HVU17**

Variable Capacitance Diode for VCO

**HITACHI**

ADE-208-021C(Z)  
Rev 3  
June 1996

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## Features

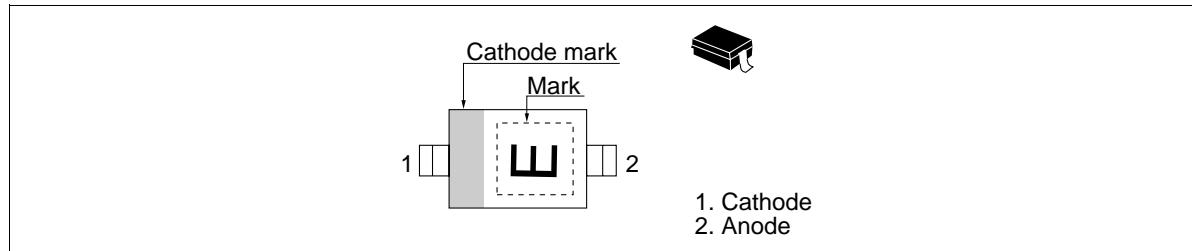
- Good linearity of C-V curve.
- To be usable at low voltage.
- High figure of merit.
- Ultra small Resin Package (URP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVU17	E	URP

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## Outline



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**HVU17**

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**Absolute Maximum Ratings (Ta = 25°C)**

Item	Symbol	Value	Unit
Reverse voltage	VR	15	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55~+125	°C

**Electrical Characteristics (Ta = 25°C)**

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	VR	15.0	~	~	V	IR = 10µA
Reverse current	IR	~	~	100	nA	VR = 9V
Capacitance	C1	50.0	~	85.0	pF	VR = 1V, f = 1 MHz
	C3	16.1	~	27.3		VR = 3V, f = 1 MHz
	C4.5	5.23	~	8.84		VR = 4.5V, f = 1 MHz
Capacitance ratio	n	5.60	~	~	~	C1/ C4.5
Figure of merit	Q	50	~	~	~	VR = 2.5V, f = 10 MHz
ESD-Capability*1	~	80	~	~	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; IR ≥ 100nA at VR =9 V

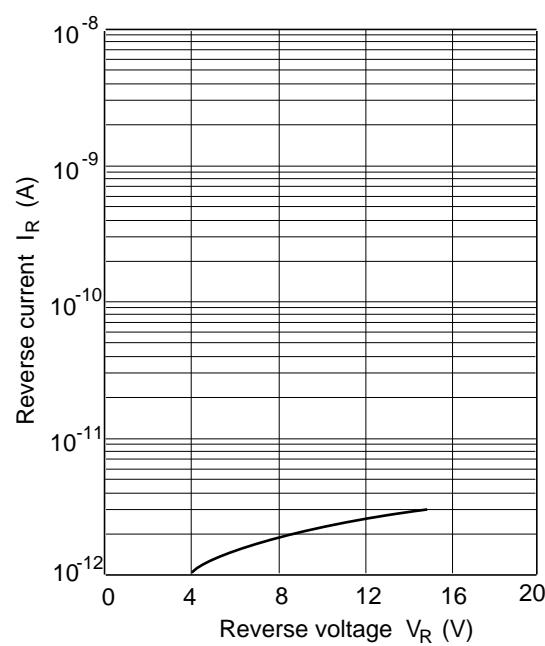
**Main Characteristic**

Fig.1 Reverse current Vs. Reverse voltage

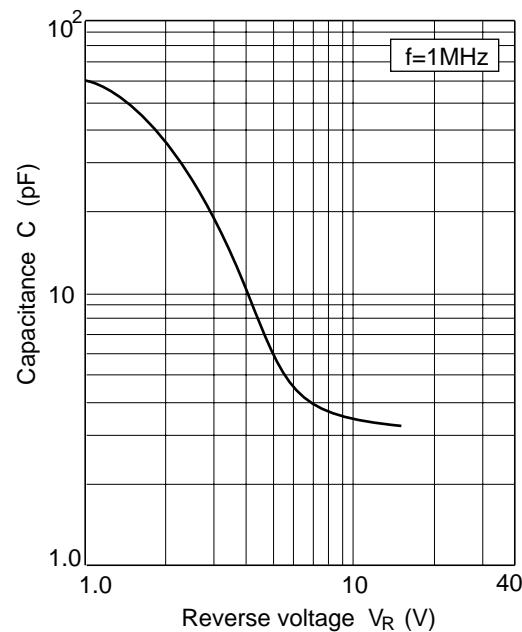


Fig.2 Capacitance Vs. Reverse voltage

**HVU17****Package Dimensions****Unit : mm**