To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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   Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HVU17

Variable Capacitance Diode for VCO

ADE-208-021C(Z)

Rev. 3
Jun. 1996

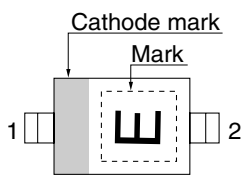
Features

- 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

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	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 voltage	V_R	15.0	—	Å\	V	I_R = 10µA
Reverse current	I_R	—	—	100	nA	V_R = 9V
Capacitance	C_1	50.0	—	85.0	pF	V_R = 1V, f = 1 MHz
	C_3	16.1	—	27.3		V_R = 3V, f = 1 MHz
	$C_{4.5}$	5.23	—	8.84		V_R = 4.5V, f = 1 MHz
Capacitance ratio	n	5.60	—	—	—	C_1/ $C_{4.5}$
Figure of merit	Q	50	—	—	—	V_R = 2.5V, f = 10 MHz
ESD-Capability[*1]	—	80	—	—	V	C = 200pF , Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; $I_R \geq 100nA$ at V_R =9 V

Main Characteristic

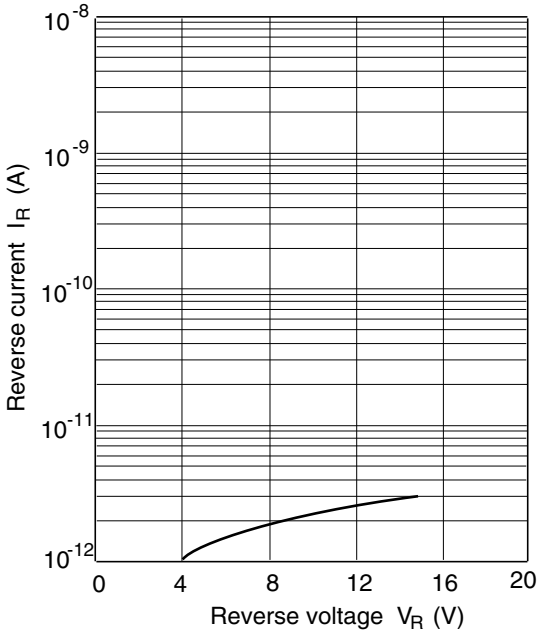


Fig.1 Reverse current Vs. Reverse voltage

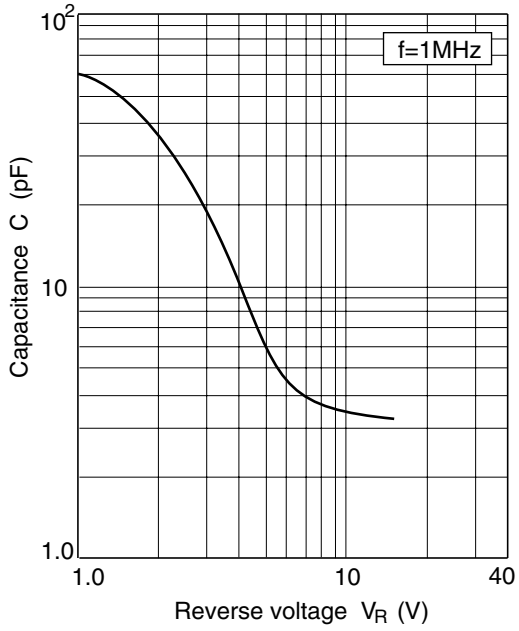
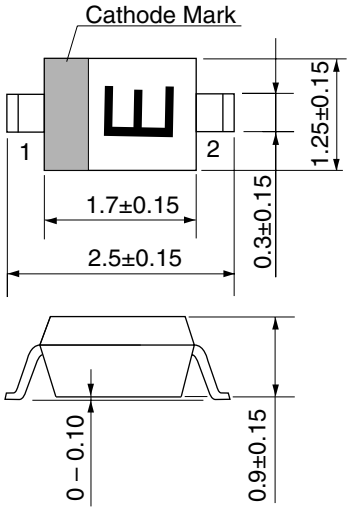


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



1. Cathode
2. Anode

Hitachi Code	URP
JEDECCode	—
EIAJCode	—
Weight(g)	0.004

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