HVU17

Variable Capacitance Diode for VCO

REJ03G0079-0400Z
(Previous: ADE-208-021C)
Rev.4.00
Sep.17.2003

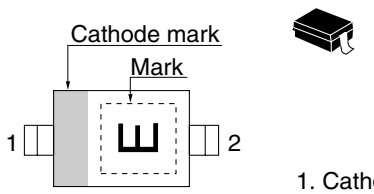
Features

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

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

Main Characteristic

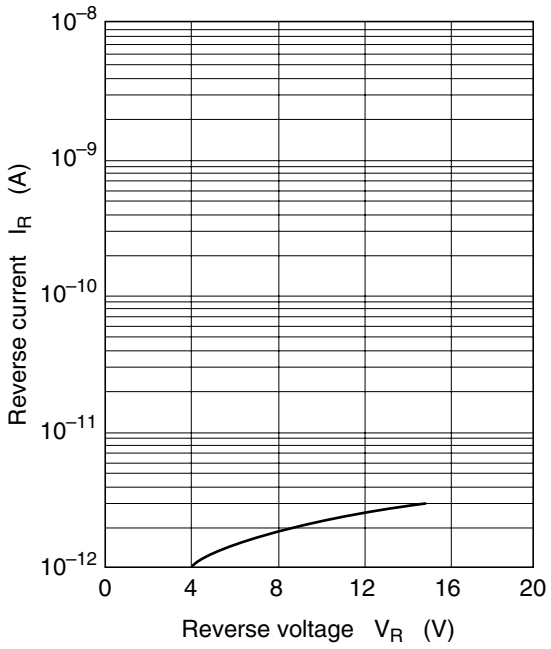


Fig.1 Reverse current vs. Reverse voltage

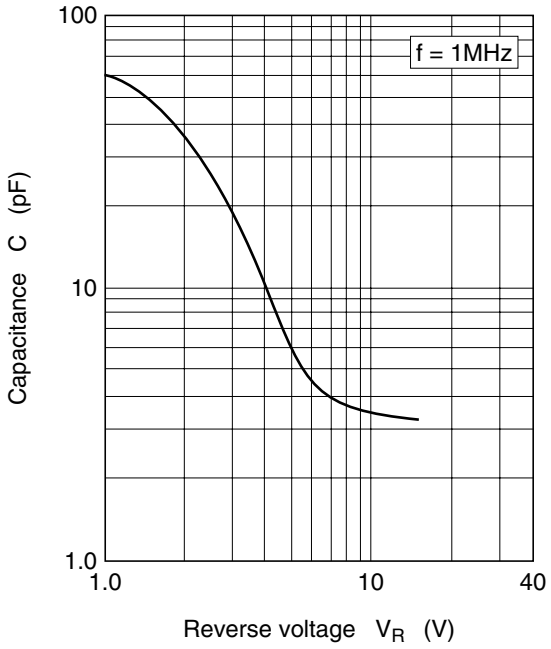
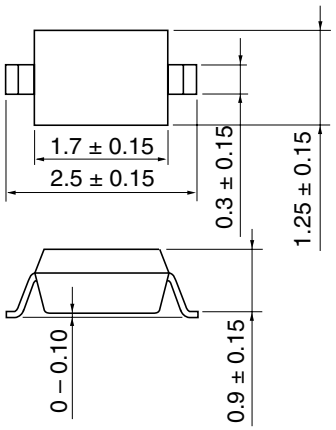


Fig.2 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003

Unit: mm



Package Code	URP
JEDEC	Conforms
JEITA	—
Mass (reference value)	0.004 g

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Colophon 1.0