

HVU350B

Variable Capacitance Diode for VCO

REJ03G0080-0200Z
(Previous: ADE-208-430A)
Rev.2.00
Sep.17.2003

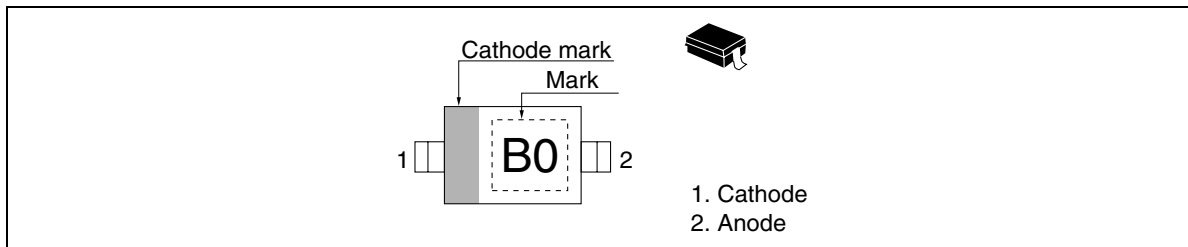
Features

- High capacitance ratio. ($n = 2.8 \text{ min}$)
- Low series resistance. ($r_s = 0.5 \Omega \text{ max}$)
- Good C-V linearity.
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVU350B	B0	URP

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	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	$V_R = 15\text{ V}$
	I_{R2}	—	—	100		$V_R = 15\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	C_1	15.5	—	17.0	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	C_4	5.0	—	6.0		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	2.8	—	—	—	C_1/C_4
Series resistance	r_s	—	—	0.5	Ω	$V_R = 1\text{ V}, f = 470\text{ MHz}$

Main Characteristic

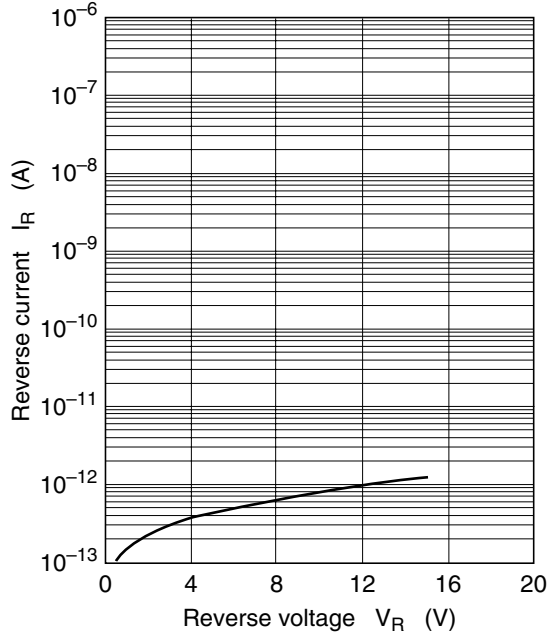


Fig.1 Reverse current vs. Reverse voltage

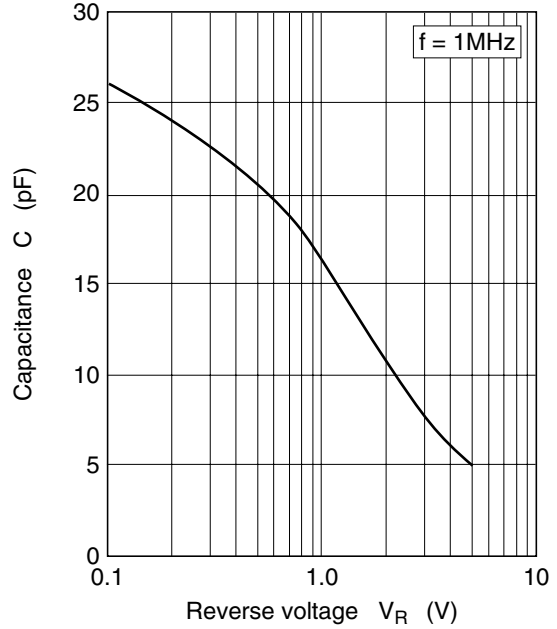


Fig.2 Capacitance vs. Reverse voltage

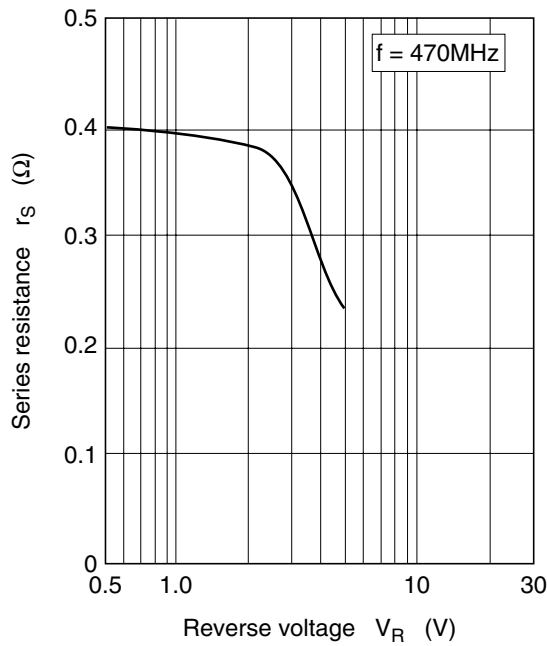


Fig.3 Series resistance vs. Reverse voltage

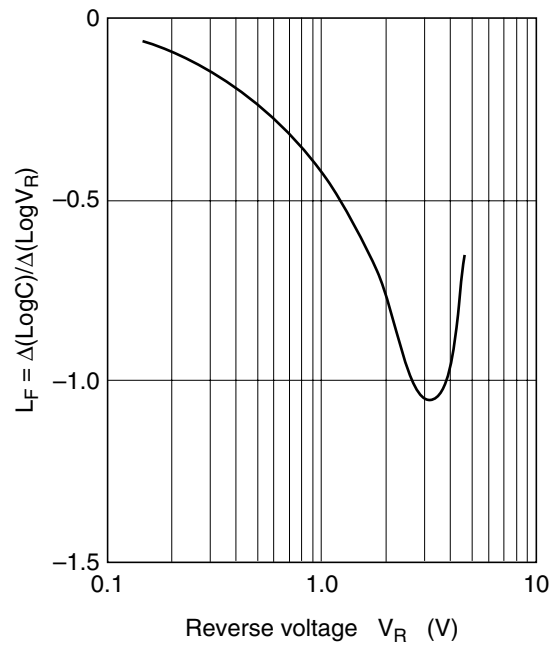
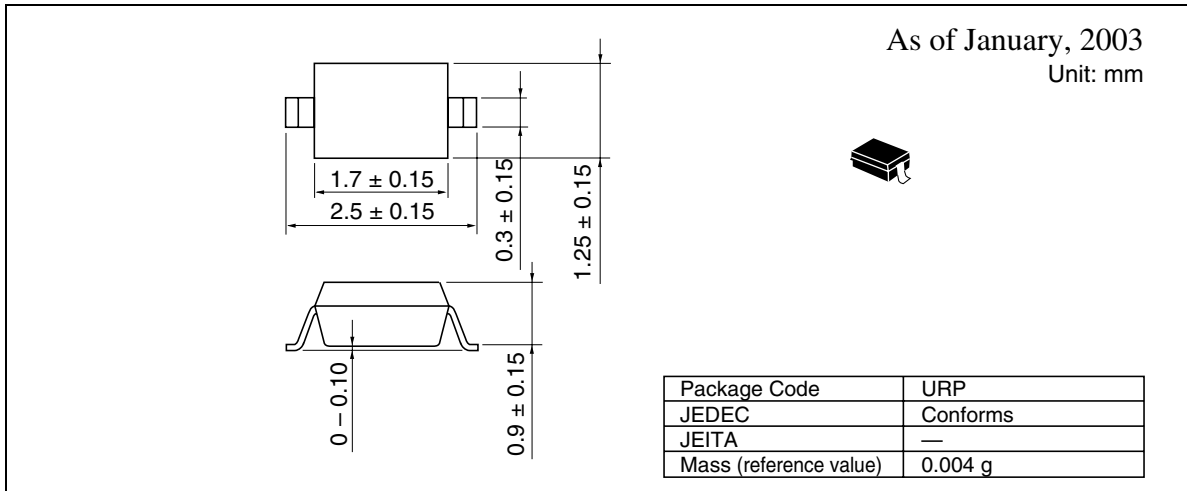


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions



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