

## HVU355B

### Variable Capacitance Diode for VCO

REJ03G0081-0100Z  
(Previous: ADE-208-498)  
Rev.1.00  
Sep.17.2003

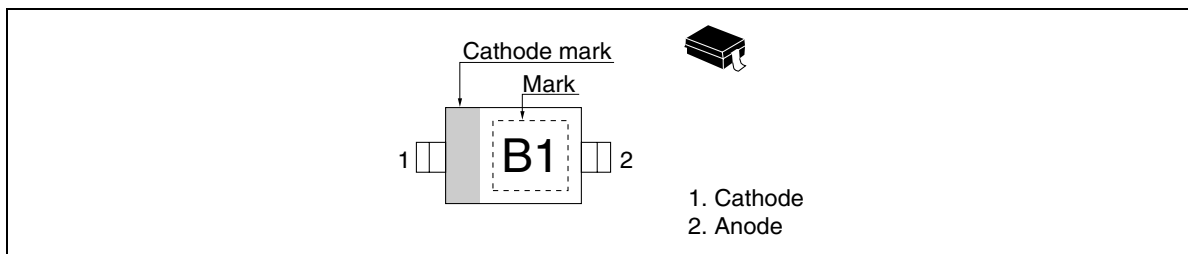
#### Features

- High capacitance ratio. ( $n = 2.20$  min)
- Low series resistance. ( $r_s = 0.60 \Omega$  max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

#### Ordering Information

Type No.	Laser Mark	Package Code
HVU355B	B1	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	$C_1$	6.40	—	7.20	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	$C_4$	2.55	—	2.95		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	$n$	2.20	—	—	—	$C_1/C_4$
Series resistance	$r_s$	—	—	0.60	$\Omega$	$V_R = 1\text{ V}, f = 470\text{ MHz}$

Main Characteristic

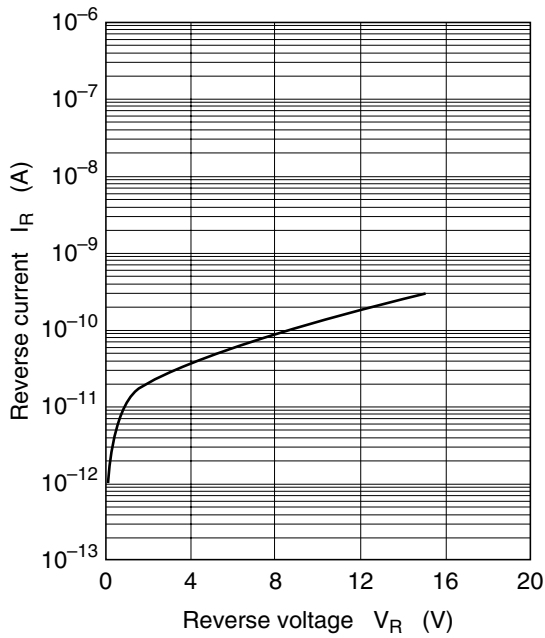


Fig.1 Reverse current vs. Reverse voltage

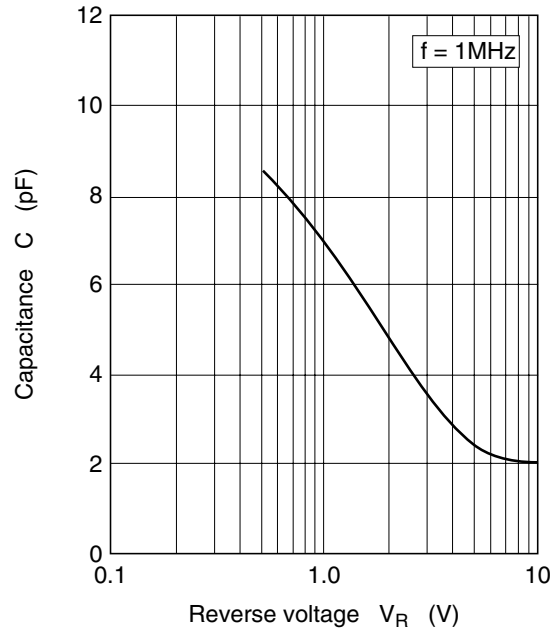


Fig.2 Capacitance vs. Reverse voltage

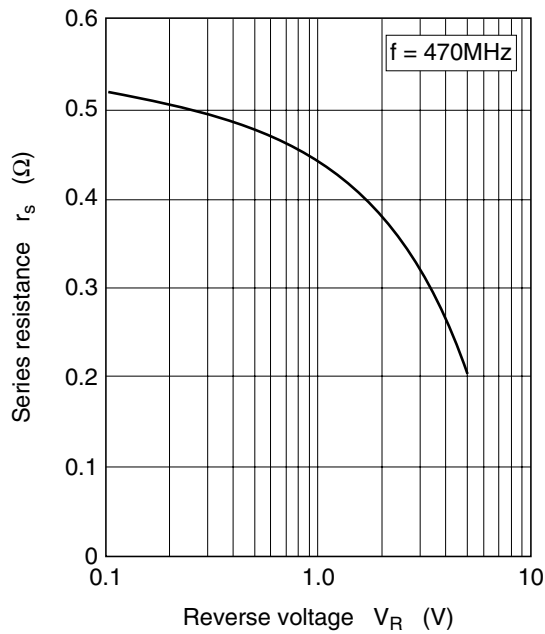


Fig.3 Series resistance vs. Reverse voltage

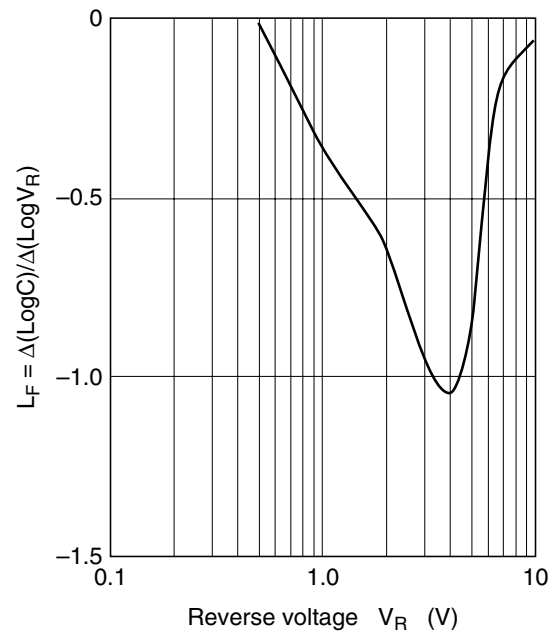
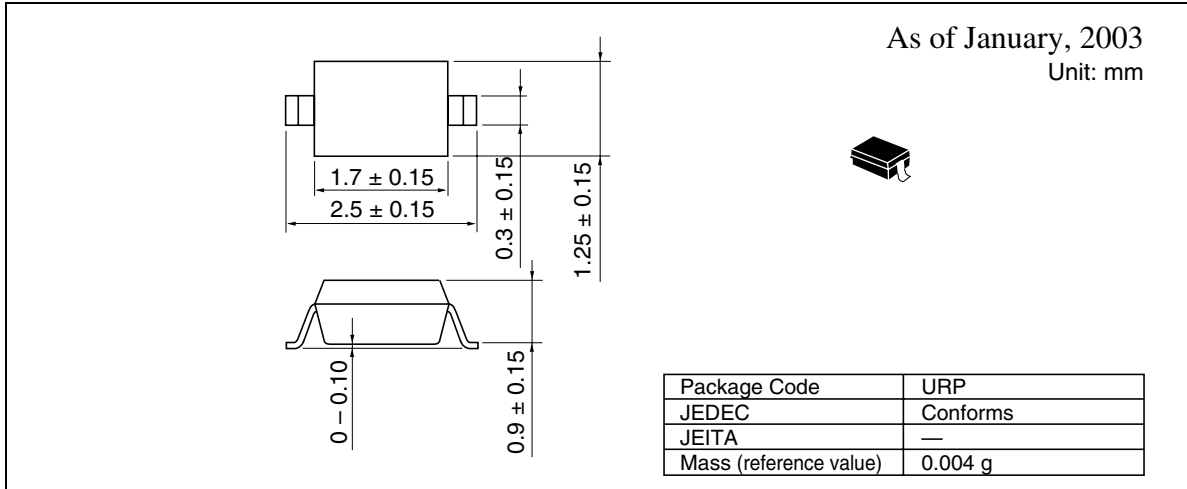


Fig.4  $L_F$  vs. Reverse voltage

Package Dimensions



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