
HVU355B

Variable Capacitance Diode for VCO

HITACHI

ADE-208-498(Z)
Rev 0

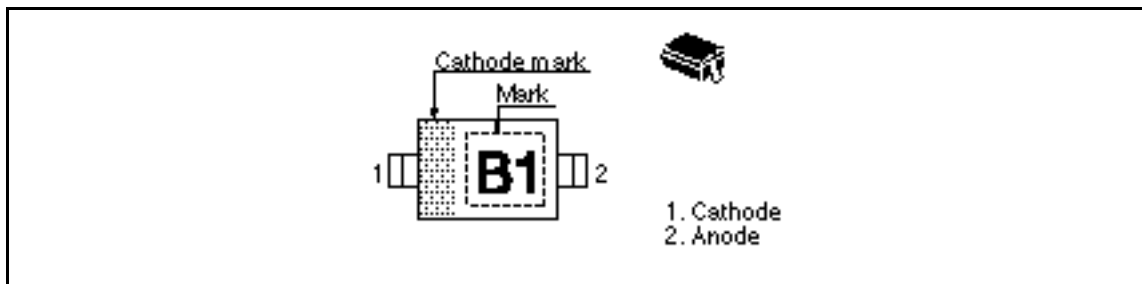
Features

- Σ High capacitance ratio. ($n = 2.20$ min)
- Σ Low series resistance. ($r_s = 0.6W_{max}$).
- Σ Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVU355B	B1	URP

Outline



HVU355B

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	$V_R = 15V$
	I_{R2}	—	—	100		$V_R = 15V, T_a = 60\text{ °C}$
Capacitance	C_1	6.40	—	7.20	pF	$V_R = 1V, f = 1\text{ MHz}$
	C_4	2.55	—	2.95		$V_R = 4V, f = 1\text{ MHz}$
Capacitance ratio	n	2.20	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	0.6	W	$V_R = 1V, f = 470\text{ MHz}$

Main Characteristic

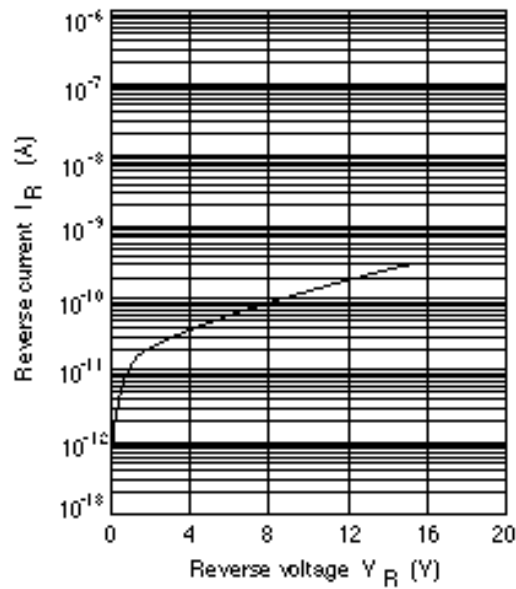


Fig.1 Reverse current I_R (A) vs. Reverse voltage V_R (V)

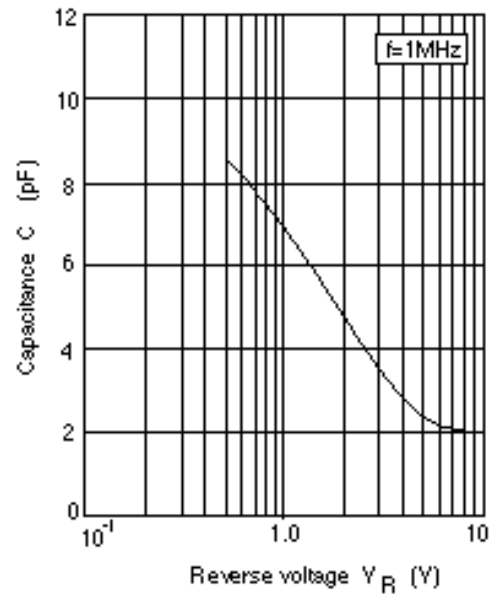


Fig.2 Capacitance C (pF) vs. Reverse voltage V_R (V)

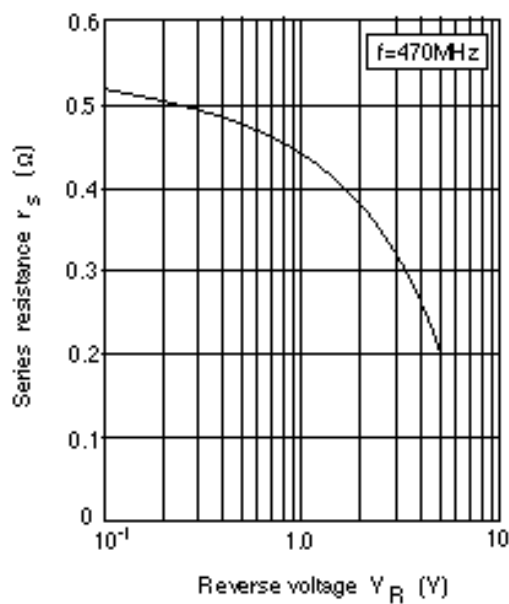


Fig.3 Series resistance r_s (Ω) vs. Reverse voltage V_R (V)

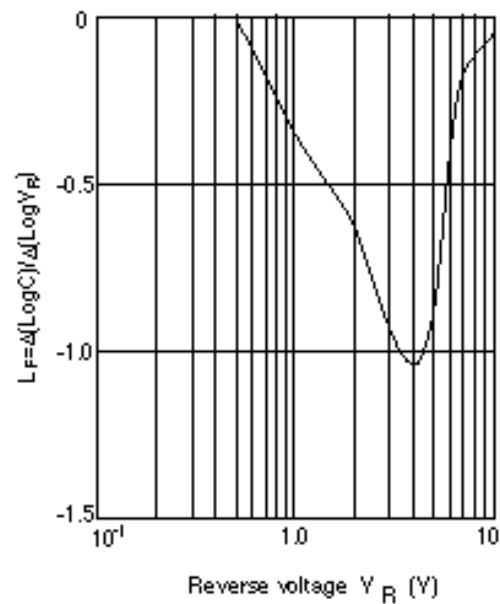


Fig.4 Linearity factor $L_F = 4(\text{Log } C)/\Delta(\text{Log } V_R)$ vs. Reverse voltage V_R (V)

HVU355B

Package Dimensions

Unit : mm

