HVL397CM

Variable Capacitance Diode for VCO

REJ03G0014-0100Z
Rev.1.00
Apr.25.2003

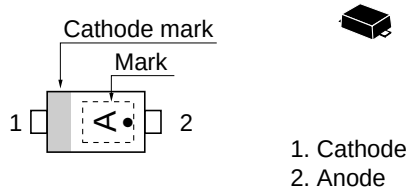
Features

- High capacitance ratio. (n = 2.9 min)
- Thin Extremely small Flat Package (TEFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVL397CM	A	TEFP

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 current	I_{R1}	—	—	10	nA	V_R = 10 V
	I_{R2}	—	—	50		V_R = 10 V, Ta = 60°C
Capacitance	C_1	27.0	—	28.5	pF	V_R = 1 V, f = 1 MHz
	C_2	18.0	—	20.0		V_R = 2 V, f = 1 MHz
	C_4	6.80	—	8.50		V_R = 4 V, f = 1 MHz
Capacitance ratio	n_1	1.3	—	—	—	C_1 / C_2
	n_2	2.9	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	1.2	Ω	V_R = 1 V, f = 470 MHz

Notes: 1. Please do not use the soldering iron due to avoid high stress to the TEFP package.
2. The material of lead is exposed for cutting plane. Therefore, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic

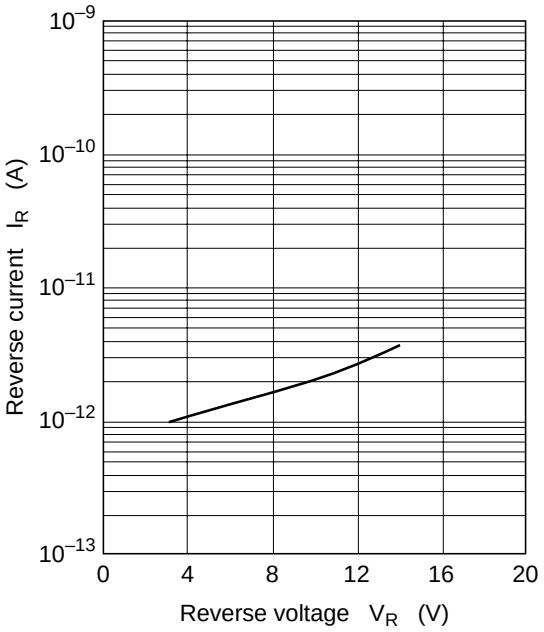


Fig.1 Reverse current vs. Reverse voltage

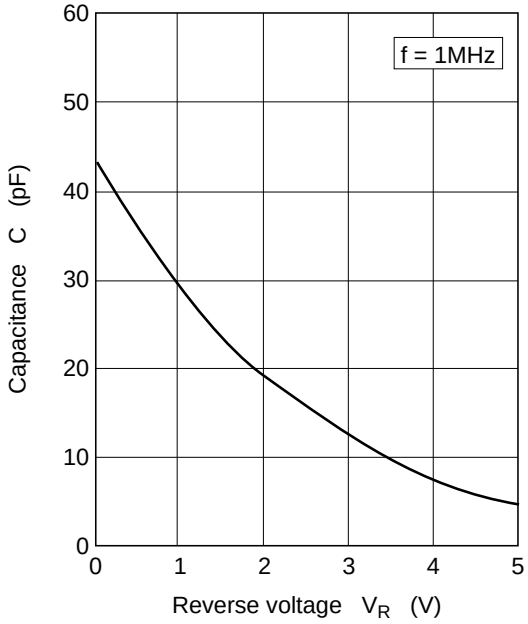


Fig.2 Capacitance vs. Reverse voltage

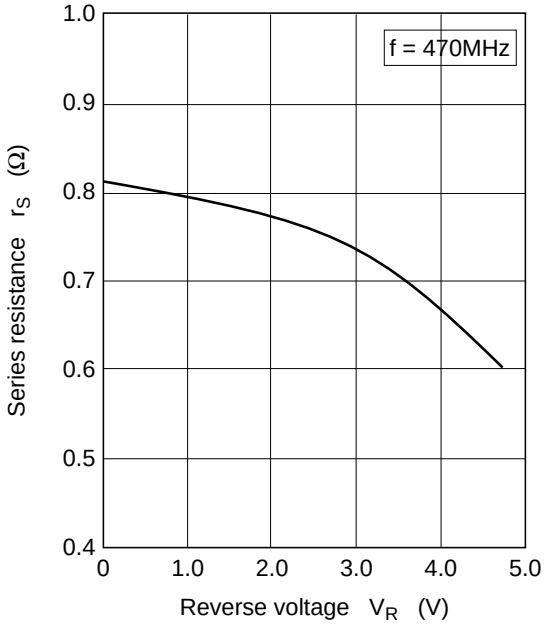


Fig.3 Series resistance vs. Reverse voltage

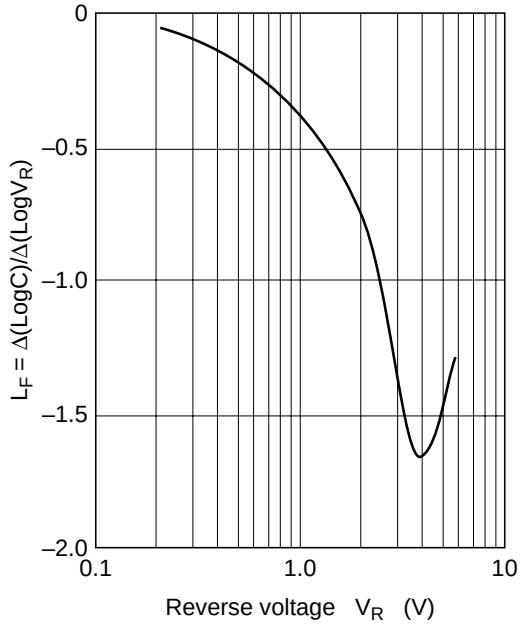
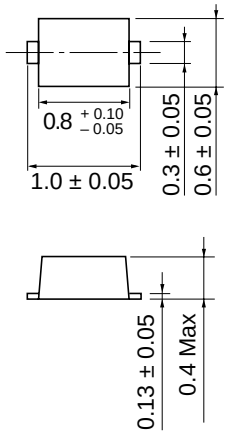


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



Package Code	TEFP
JEDEC	—
JEITA	—
Mass (reference value)	0.0006 g

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

http://www.renesas.com

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