

# HVL396CM

## Variable Capacitance Diode for VCO

REJ03G0013-0300

Rev.3.00

Mar 21, 2006

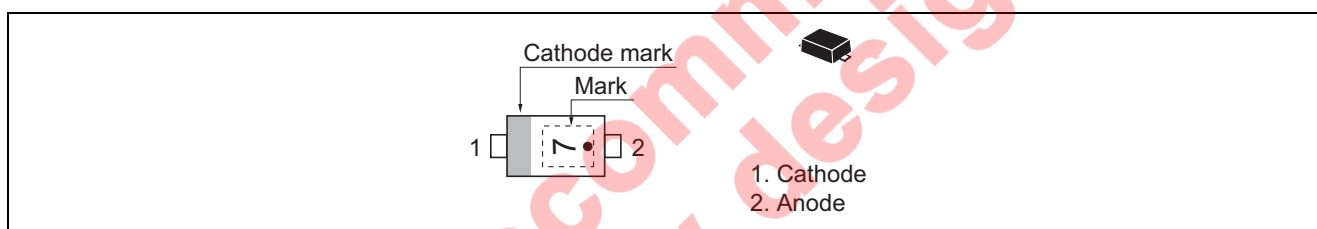
### Features

- High capacitance ratio. ( $n = 2.62$  min)
- Low series resistance. ( $r_s = 0.40 \Omega$  max)
- Thin Extremely small Flat Lead Package (TEFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HVL396CM	7	TEFP	PUSF0002ZA-A

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	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	$V_R = 10\text{ V}$
	$I_{R2}$	—	—	50		$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	$C_1$	14.6	—	15.8	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	$C_4$	5.20	—	5.80		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	2.62	—	—	—	$C_1 / C_4$
Series resistance	$r_s$	—	—	0.40	$\Omega$	$V_R = 1\text{ V}, f = 470\text{ MHz}$

Note: For TEPF package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

## Main Characteristic

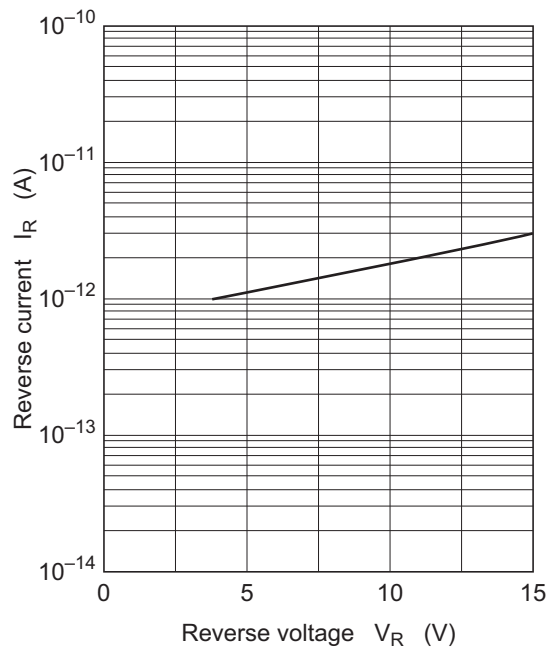


Fig.1 Reverse current vs. Reverse voltage

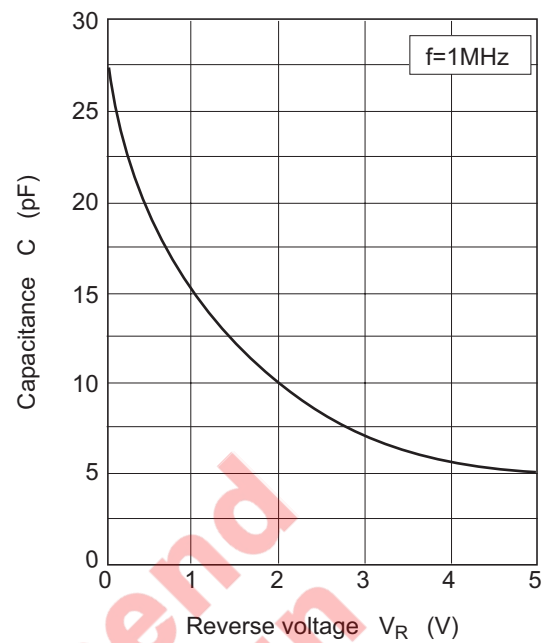


Fig.2 Capacitance vs. Reverse voltage

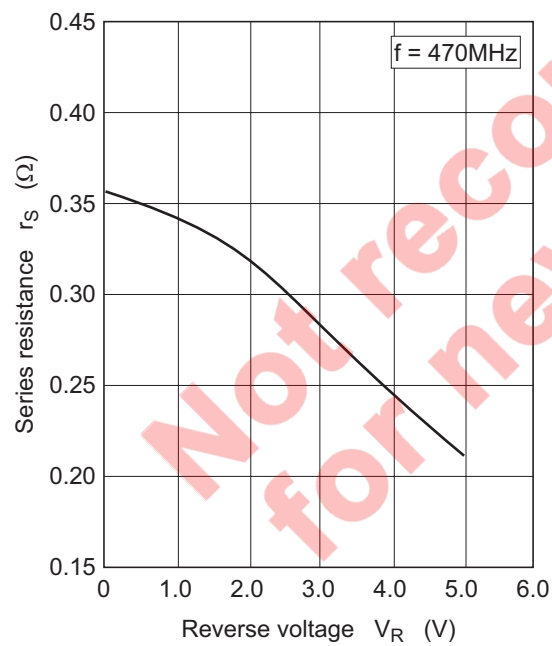
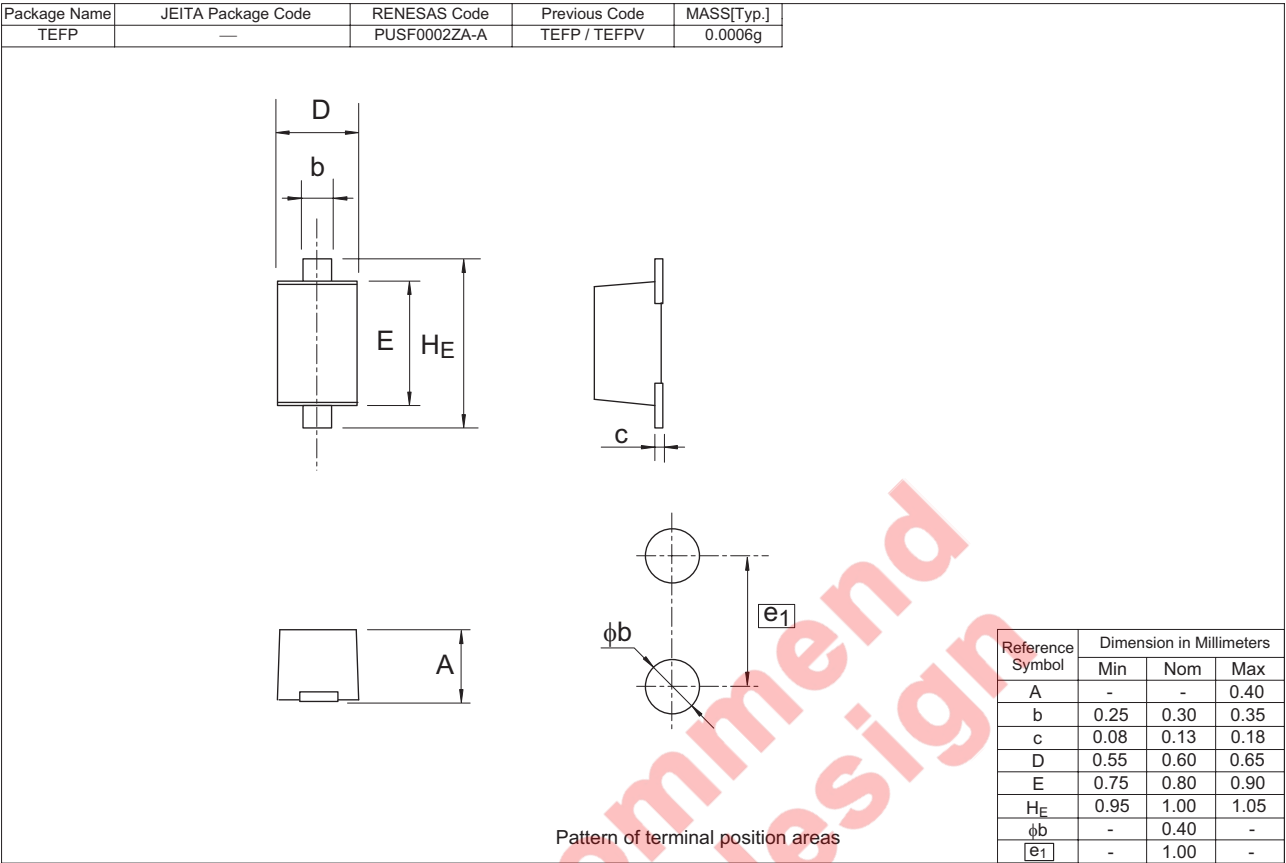


Fig.3 Series resistance vs. Reverse voltage

Package Dimensions



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#### **Renesas Technology (Shanghai) Co., Ltd.**

Unit 204, 205, AZIACenter, No.1233 Lujiazui Ring Rd, Pudong District, Shanghai, China 200120  
Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7898

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7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong  
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1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632  
Tel: <65> 6213-0200, Fax: <65> 6278-8001

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Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea  
Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

#### **Renesas Technology Malaysia Sdn. Bhd**

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia  
Tel: <603> 7955-9390, Fax: <603> 7955-9510