

# HVL381CM

## Variable Capacitance Diode for VCO

REJ03G0037-0300

Rev.3.00

Mar 14, 2006

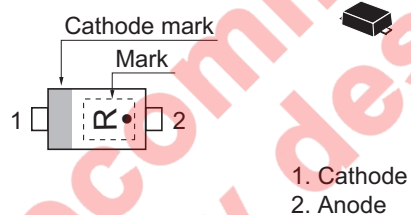
### Features

- High capacitance ratio. ( $n = 1.65$  min)
- Low series resistance. ( $r_s = 0.50 \Omega$  max)
- Thin Extremely small Flat Lead Package (TEFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HVL381CM	R	TEFP	PUSF0002ZA-A

### 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	$C_1$	10.2	—	10.8	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	$C_3$	5.90	—	6.35		$V_R = 3\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	1.650	—	1.785	—	$C_1 / C_3$
Series resistance	$r_s$	—	—	0.50	$\Omega$	$V_R = 1\text{ V}, f = 470\text{ MHz}$

Note: For TEF 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

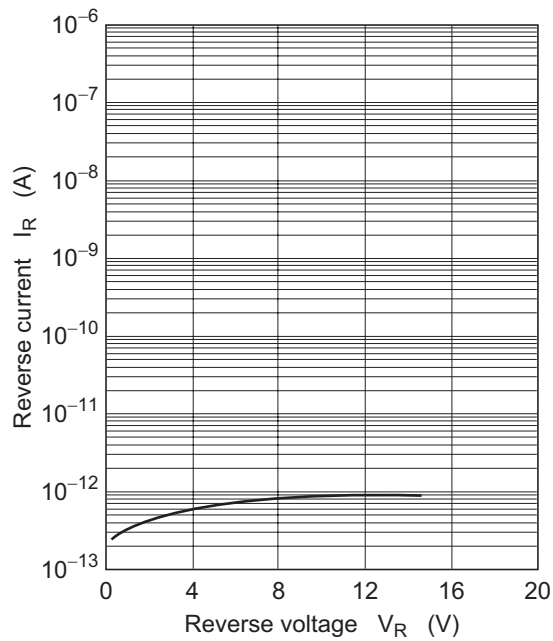


Fig.1 Reverse current vs. Reverse voltage

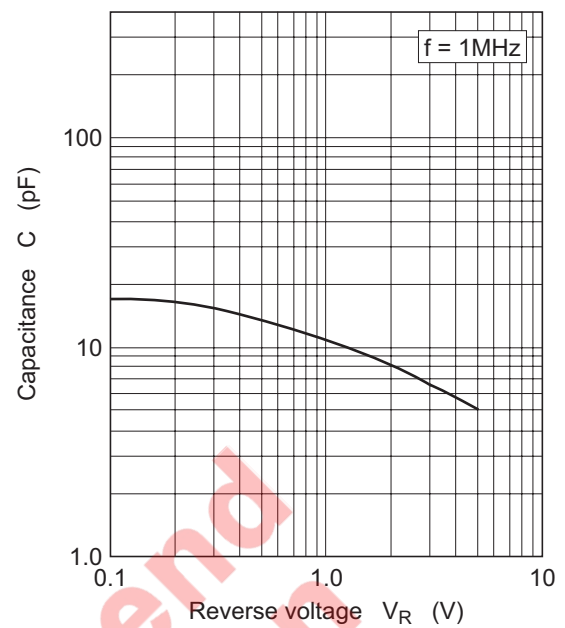


Fig.2 Capacitance vs. Reverse voltage

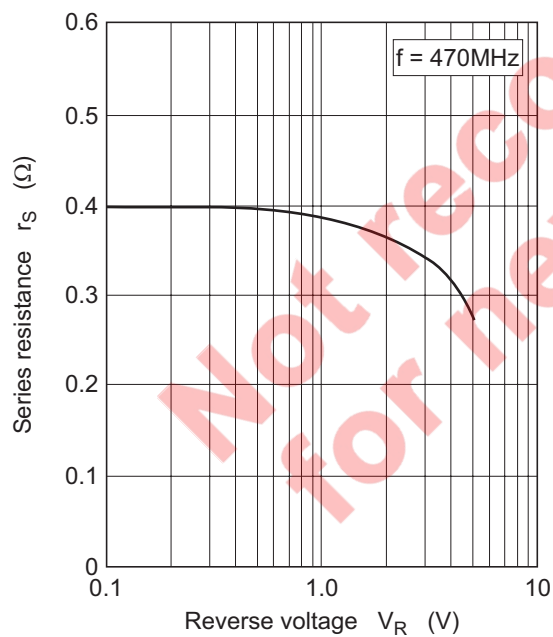
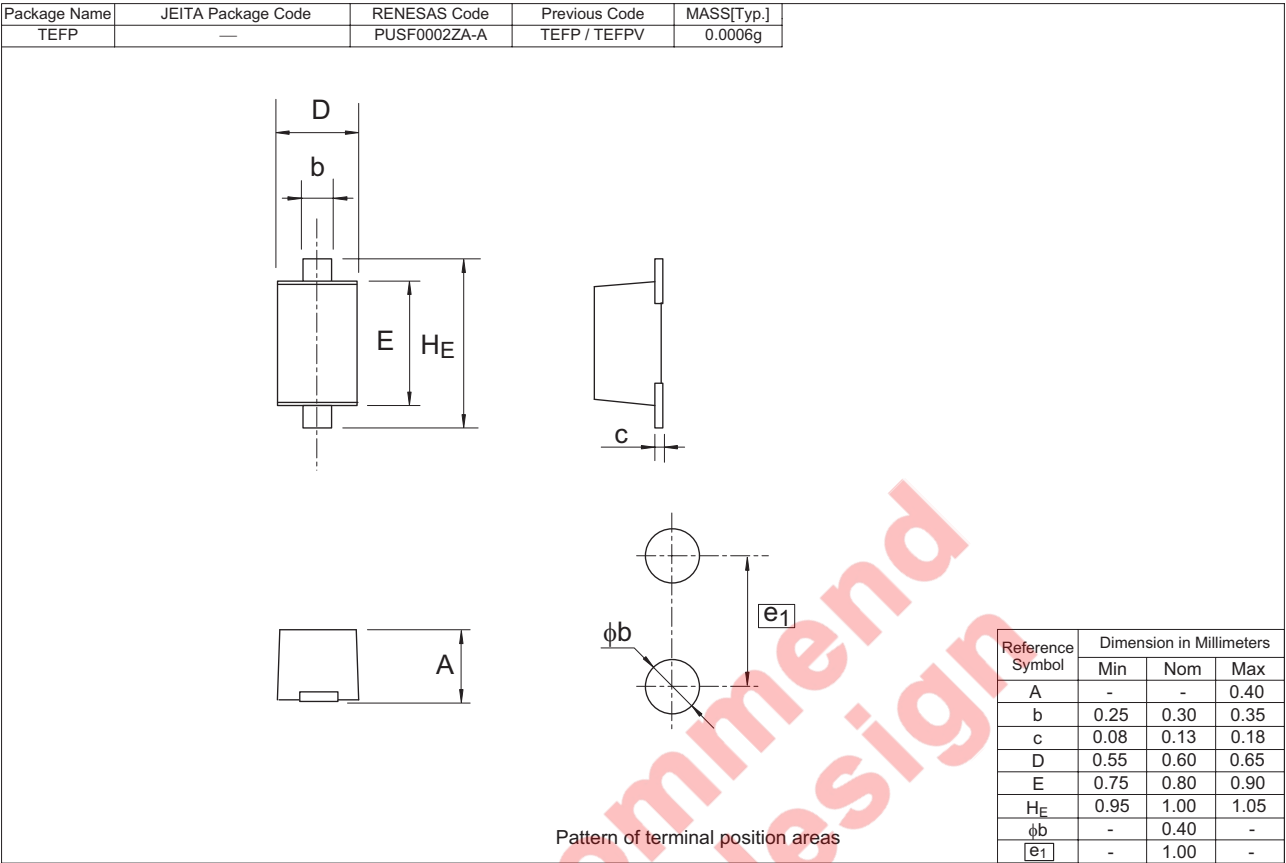


Fig.3 Series resistance vs. Reverse voltage

Package Dimensions



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