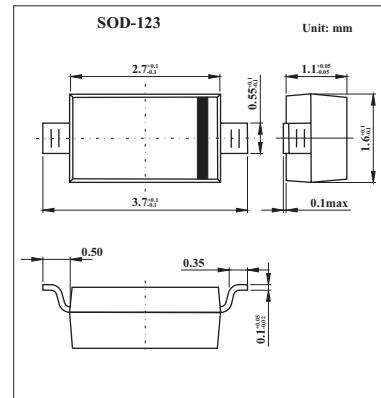


## Variable Capacitance Diode for VCO

### HVD369B

#### ■ Features

- Low capacitance and to be usable at GHz.
- High capacitance ratio. ( $n = 2.3 \text{ min}$ )
- Low series resistance. ( $r = 0.5 \Omega \text{ max}$ )
- Super small Flat Package (SFP) is suitable for surface mount design.



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	15	V
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	$I_{R1}$	$V_R = 15 \text{ V}$			10	nA
	$I_{R2}$	$V_R = 15 \text{ V}, T_a = 60^\circ\text{C}$			100	
Capacitance	$C_1$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	4.65		5.15	pF
	$C_4$	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	1.85		2.15	
Capacitance ratio	$n$	$C_1 / C_4$	2.3			
Series resistance	$r_s$	$V_R = 4 \text{ V}, f = 470 \text{ MHz}$			0.5	$\Omega$

#### ■ Marking

Marking	D
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