

## SMD Type

Diodes

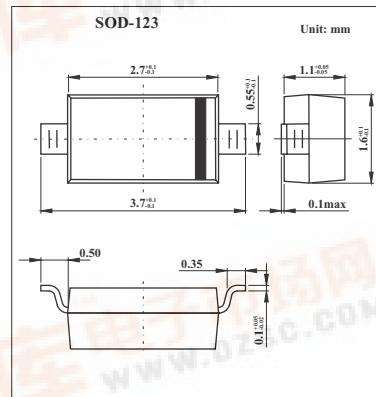
## Variable Capacitance Diode for VCO

### HVD355B



#### ■ Features

- High capacitance ratio. ( $n = 2.20 \text{ min}$ )
- Low series resistance. ( $r_s = 0.60 \Omega \text{ max}$ )
- Super small Flat Lead 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	$C_1$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	6.4		7.2	pF
	$C_4$	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	2.55		2.95	
Capacitance ratio	$n$	$C_1 / C_4$	2.2			
Series resistance	$r_s$	$V_R = 1 \text{ V}, f = 470 \text{ MHz}$			0.6	$\Omega$

#### ■ Marking

Marking	B
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