

HVC376B

Variable Capacitance Diode for VCO

REJ03G0091-0100Z
(Previous: ADE-208-687)
Rev.1.00
Sep.17.2003

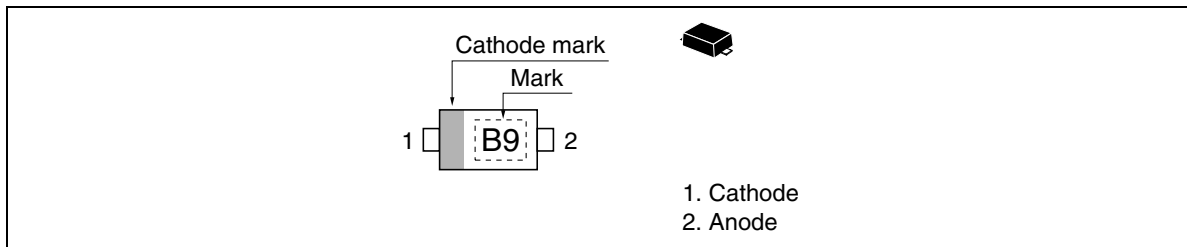
Features

- High capacitance ratio ($n = 4.3\text{min}$) and good C-V linearity.
- High Q circuit can be composed due to low series resistance. ($r_s = 0.8 \Omega \text{ max}$)
- To be usable at low voltage.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC376B	B9	UFP

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

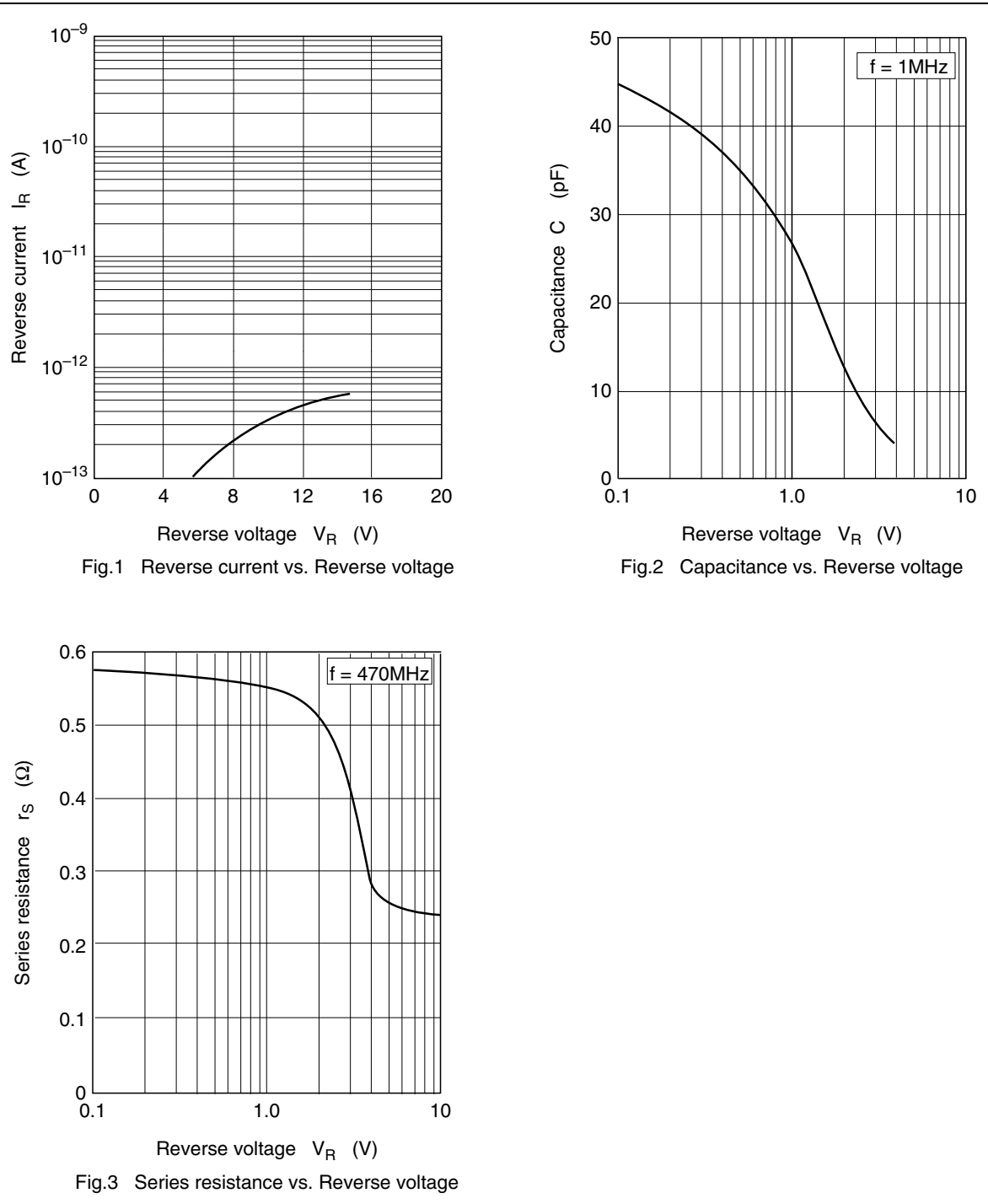
Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics

(Ta = 25°C)

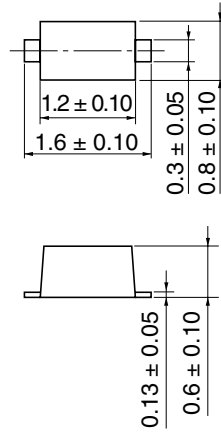
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_{R1}	—	—	10	nA	$V_R = 10\text{ V}$
	I_{R2}	—	—	100		$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	C_1	25.0	—	28.5	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	C_4	4.8	—	6.8		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	4.3	—	—	—	C_1/C_4
Series resistance	r_s	—	—	0.8	Ω	$V_R = 1\text{ V}, f = 470\text{ MHz}$

Main Characteristic



Package Dimensions

As of January, 2003
Unit: mm



Package Code	UFP
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.0016 g

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