

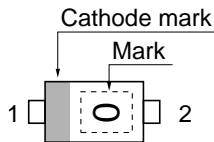
Features

- High capacitance ratio ($n=14.5\text{min}$) and suitable for wide band tuner.
- Low series resistance and good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC300A	0	UFP

Outline



1. Cathode
2. Anode

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	32	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	$V_R = 30V$
	I_{R2}	—	—	100		$V_R = 30V, T_a = 60^\circ C$
Capacitance	C_2	39.5	—	47.4	pF	$V_R = 2V, f = 1\text{ MHz}$
	C_{25}	2.60	—	3.03		$V_R = 25V, f = 1\text{ MHz}$
Capacitance ratio	n	14.5	—	—	—	C_2 / C_{25}
Series resistance	r_s	—	—	1.10	Ω	$V_R = 5V, f = 470\text{ MHz}$
Matching error	$\Delta C / C^{11}$	—	—	2.0	%	$V_R = 2\text{ to }25V, f = 1\text{ MHz}$

Note 1. C.C system (Continuous Connected taping system) enable to make any 10 pcs of $\Delta C / C$ continuous in a reel , expect extention to another group.
Calculate Matching Error,

$$\Delta C / C = \frac{(C_{max} - C_{min})}{C_{min}} \times 100 (\%)$$