HVC376B

VARIABLE CAPACITANCE DIODE SILICON TYP

Application

·VCO、VCO'S mobile communications equipment
·FM and AFC in communication set

SOD-523

Features

·Excellent linearity
·Hing Capacitance ratio:C_{1V}/C_{4V} > 4.3
·Low series resistance: rs≤0.8Ω
·package:SOD-523

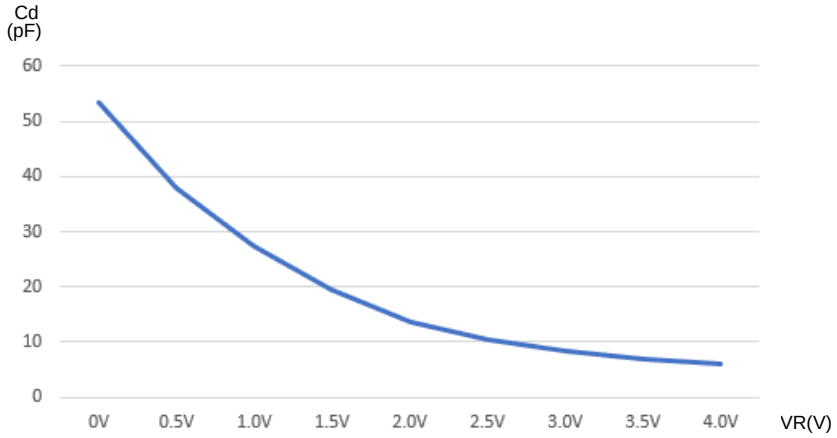
Maximum ratings

Parameter	Symbo1	Rating		Unit
		Min	Max	
Assignment Temperature Range	T_{amb}	-55	100	℃
Storage Temperature Range	T_{atg}	-55	125	℃
Maximum Reverse voltage	V_{RM}		10	V
Junction Temperature	T_j		125	℃
Forward voltage(I_F=20mA)	V_F		1	V

Electrical Characteristics(at Tamb=25℃)

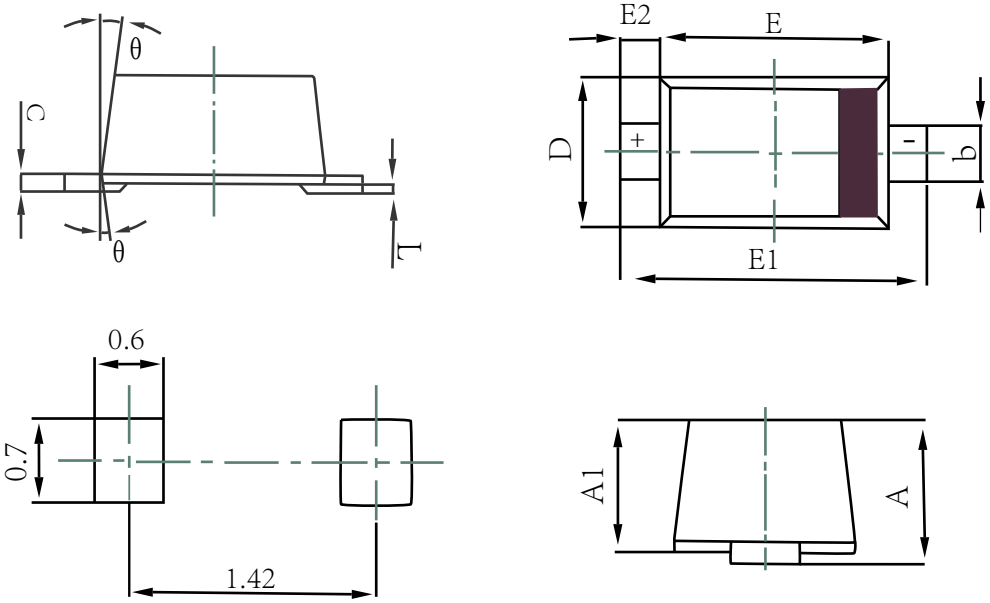
Parameter	Symbo1	Test Conditions	Min	Typ	Max	Unit
Diode capacitance	C_1	V_{R1}=1V	24.5		29	PF
Diode capacitance	C_2	V_{R2}=4V	4.8		6.8	PF
Capacitance ratio	C_1/C_2	V_{R1}=1V,V_{R2}=4V	4.3			
Reverse Current	I_R	V_R=10V			10	nA
Forward Voltage	V_F	I_F=20mA			1	V
serises resistance	r_s	F=470MHz,C_0=14pF			0.8	Ω

Fig 1. Diode capacitance as a function of reverse voltage; typical values.



Package Dimensions

SOD-523



Unit	A	A1	b	c	D	E	E1	E2	L	θ
Max.	0.77	0.70	0.35	0.15	0.85	1.30	1.70	0.20 REF.	0.07	7° REF.
Min.	0.51	0.50	0.25	0.08	0.75	1.10	1.50		0.01	