

VARIABLE CAPACITANCE DIODE SILICON TYP

Application

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

Features

- Excellent linearity
- Hing Capacitance ratio: $C_{1v}/c_{4v} > 4.3$
- Low series resistance: $r_s \leq 0.5\Omega$
- package:SOD-523



SOD-523

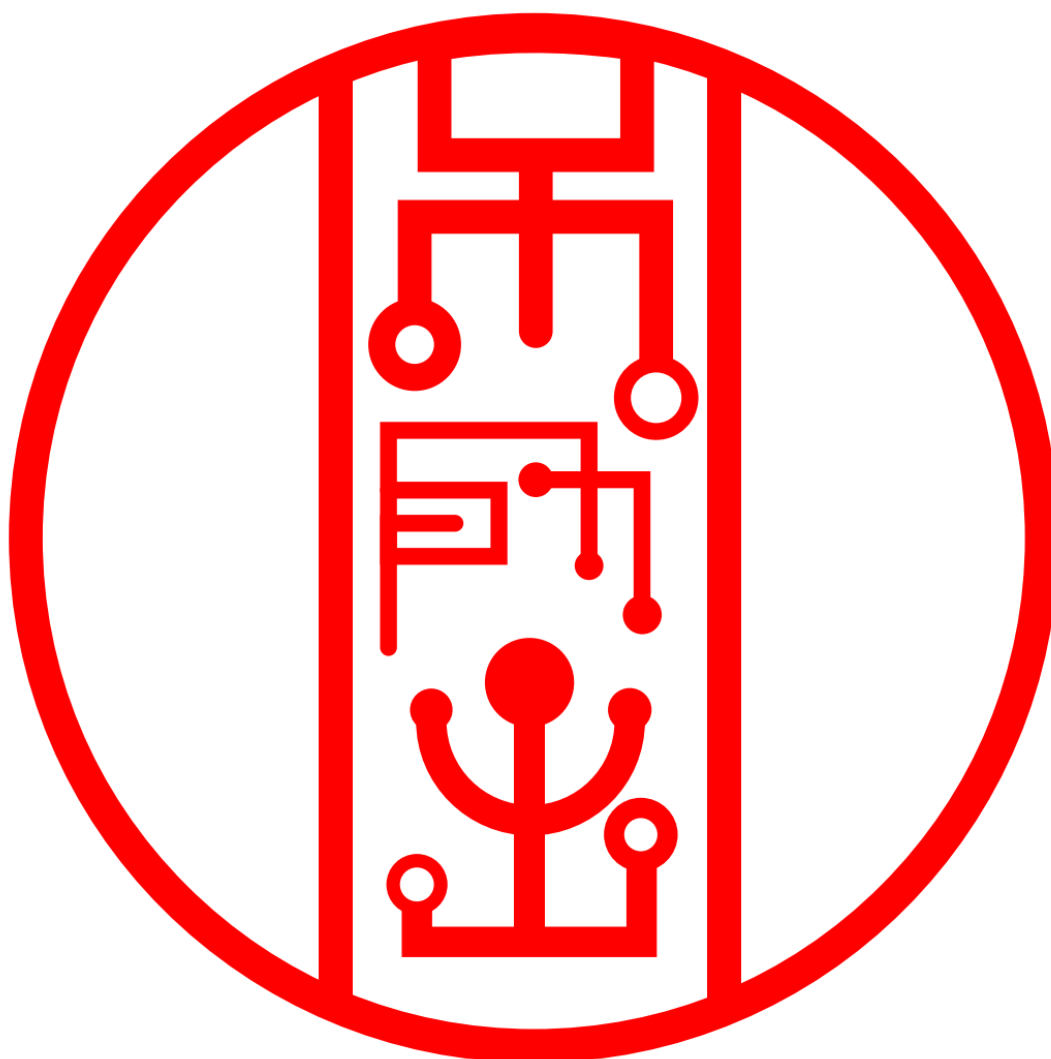
Maximum ratings

Parameter	Symbo1	Rating		Unit
		Min	Max	
Assignment Temperature Range	T_{amb}	-55	100	°C
Storage Temperature Range	T_{atg}	-55	125	°C
Maximum Reverse voltage	V_{RM}		15	V
Junction Temperature	T_j		125	°C
Forward voltage($I_F=20mA$)	V_F		1	V

Electrical Characteristics(at $T_{amb}=25^{\circ}C$)

Parameter	Symbo1	Test Conditions	Min	Typ	Max	Unit
Diode capacitance	C_1	$V_{R1}=1V$	15		17.5	PF
Diode capacitance	C_2	$V_{R2}=4V$	4.8		6.3	PF
Capacitance ratio	C_1/C_2	$V_{R1}=1V, V_{R2}=4V$	2.8			
Reverse Current	I_R	$V_R=15V$			10	nA
Forward Voltage	V_F	$I_F=20mA$			1	V
serises resistance	r_s	$F=470MHz, C_0=14pF$			0.5	Ω

Electrical Characteristics

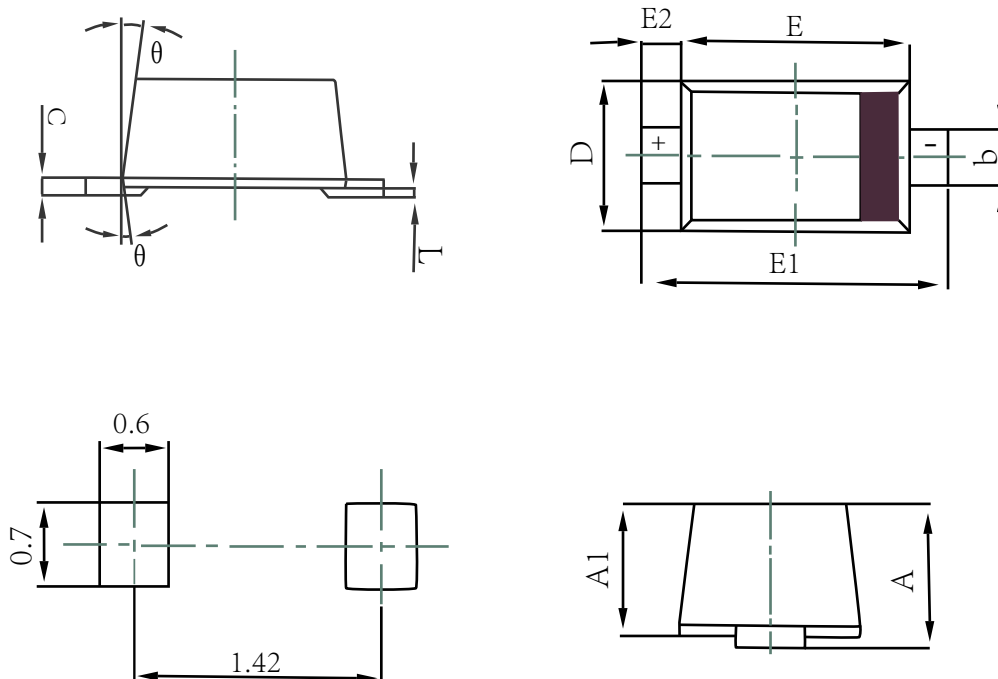




HVC350B

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	0.07	7°
Min.	0.51	0.50	0.25	0.08	0.75	1.10	1.50	REF.	0.01	REF.