

Typical Applications

Telecommunication
 Wireless Application

Features

Standard 4-Pin DIP Package



Previous Vectron Model Numbers

BA

Frequency range

1 MHz – 125 MHz

Frequency stabilities¹

Parameter	Min	Typ	Max.	Units	Operating temp range	Ordering Code ⁵
Overall (vs. Initial, vs. operating temperature range vs. supply voltage change vs. load change vs. aging /1. Year)	-100.0		+100.0	ppm	-0 ... +70°C	C104
	-50.0		+50.0	ppm	-0 ... +70°C	C505
	-25.0		+25.0	ppm	-0 ... +70°C	C255
	-100.0		+100.0	ppm	-40 ... +85°C	F104
	-50.0		+50.0	ppm	-40 ... +85°C	F505
	-32.0		+32.0	ppm	-40 ... +85°C	F325

Supply voltage

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code ⁵
Supply voltage (Vs)	4.75	5.0	5.25	VDC		SV050
Current consumption			40 50 55 70	mA	@ HCMOS fo < 24.0 MHz @ HCMOS fo < 50.0 MHz @ HCMOS fo < 70.0 MHz @ HCMOS fo < 100.0 MHz	
Supply voltage (Vs)	3.135	3.3	3.465	VDC		SV050
Current consumption			30 35 40 50	mA	@ HCMOS fo < 24.0 MHz @ HCMOS fo < 50.0 MHz @ HCMOS fo < 70.0 MHz @ HCMOS fo < 100.0 MHz	

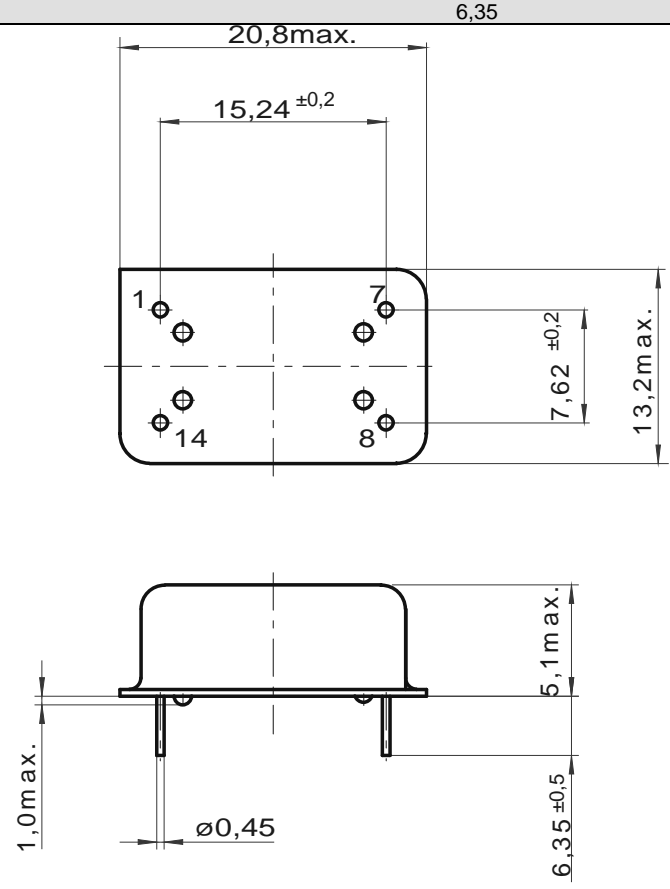
RF output

Parameter	Min	Typ	Max.	Units	Condition	Ordering Code ⁵
Signal	HCMOS					RFH
Load		15.0		pF		
Rise and Fall time			10	ns	@ 15 pF 10 to 90 %	
Duty cycle	40		60	%	@ Vs/2	

Frequency Tuning (EFC)

Parameter	Min	Typ	Max.	Units	Condition
Tuning Range	±50.0 ±100.0	±90.0 ±140.0	+200.0 ±200.0	ppm ppm	
Linearity			10	%	
Tuning Slope	Positive				
Control Voltage Range	0.0 0.5	1.65 2.5	3.3 4.5	VDC VDC	with Vs=3.3VDC with Vs=5.0VDC
Frequency control input impedance	10			k Ω	

Enclosures

Type A			Package Codes:
Code A1	Height "H" 7.5	Pin Length "L" 6,35	
 <p style="text-align: right;">Dimensions: mm</p>			
Pin Connections			
1 Control Voltage 7 Ground (Case) 8 RF Output 14 Supply Voltage Input (Vs) Outline Drawing:			
Marking			
C5419A1-xxxx frequency * C.XYYWW			

Absolute Maximum Ratings

Parameter	Min	Typ	Max.	Units	Condition
Supply voltage (Vs)			7	V	
Operable temperature range	-30		+80	°C	
Storage temperature range	-40		+90	°C	

How to Order this Product:

Step 1	Use this worksheet to forward the following information to your factory representative:				
	Model	Stability Code	Supply Voltage Code	Tuning Range	Package Code
	C5419				
<i>Example:</i>	C5419	C104	SV050	50	A1

Step 2	The factory representative will then respond with a Vectron Model Number in the following Configuration:			
	Model	Package Code	Dash	Dash Number
	C5419	[Customer Specified Package Code]	-	[Factory Generated 4 digit number]

Typical P/N = C5419A1-0001

Notes:

- 1 Contact factory for improved stabilities or additional product options. Not all options and codes are available at all frequencies.
- 2 Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)
- 3 Phase noise degrades with increasing output frequency.
- 4 Subject to technical modification.
- 5 Contact factory for availability.