



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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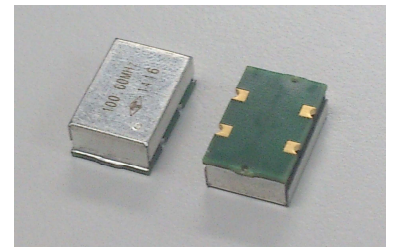


High Frequency Very Low Noise/Low g-Sensitivity VCXO

VLCU-Type series

VLCU-Type Series in 14 x 9mm SMD package

VLCU-Type series is a high frequency high performance VCXO offering high frequency and very low phase noise/Low g-Sensitivity. The part comes in a small SMD package which makes it suitable for reflow soldering during pick and place assembly.



FEATURES

- **Low Phase Noise**
- **Low g-Sensitivity**
- Small SMD Package
- Low Power Consumption

APPLICATIONS

- Instrument
- Microwave Communication
- Test & Measurement
- Telecom Systems
- Satellite Communication

RoHS Compliant Standard

ELECTRICAL SPECIFICATIONS

1. OUTPUT (PIN = "R.F. OUTPUT")

	Parameter	Min.	Typ.	Max.	Unit	Test Condition
1.1.	Frequency (Fo)	50		125	MHz	Standard Frequency : 100MHz, 122.88MHz, 125MHz
1.2.	Frequency Stability (Overall)	-25		+25	ppm	Frequency stability includes frequency tolerance@25°C and frequency stability vs. operating temperature range and voltage variance and 10 years aging.
1.3.	Operating Temperature Range	-20°C ~ +70°C -40°C ~ +85°C			°C	
1.4.	Storage Temperature Range	-45°C ~ +90°C			°C	
1.5.	Waveform	Sine wave				
1.6.	Level	+10			dBm	
1.7.	Load		50		Ω	
1.8.	Harmonics			-30	dBc	
1.1.	Phase Noise (Max.)	100MHz	122.88MHz	125MHz		Refer to Table 1 : Ordering Information
1.2.		-84	-80	-80	dBc/Hz	@ 10Hz
1.3.		-117	-112	-112	dBc/Hz	@ 100Hz
1.4.		-144	-142	-142	dBc/Hz	@ 1KHz
1.5.		-165	-163	-163	dBc/Hz	@ 10KHz
1.6.		-172	-172	-172	dBc/Hz	@ 100KHz
1.7.		-175	-175	-175	dBc/Hz	@ 1MHz

2. ELECTRICAL FREQUENCY ADJUSTMENT (PIN = “VCO INPUT”)

	Parameter	Min.	Typ.	Max.	Unit	Test Condition
2.1.	Pulling Range	+/-30			ppm	
2.2.	Control Voltage	0		+5.0	V	
2.3.	Slope	Positive				
2.4.	Center Voltage		+2.5		V	
2.5.	Linearity	-10		+10	%	
2.6.	Modulation Bandwidth	5			KHz	
2.7.	VC Input Impedance	1			Mohm	

3. INPUT POWER (PIN = “+VDC”)

	Parameter	Min.	Typ.	Max.	Unit	Test Condition
3.1.	Voltage	+4.75	+5	+5.25	V	
3.2.	Current			30	mA	At maximum supply voltage

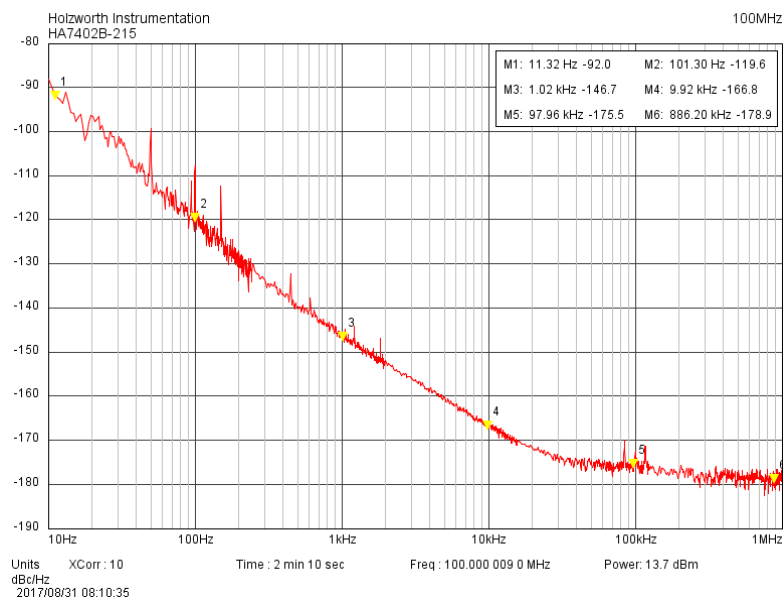
4. ENVIRONMENTAL

	Parameter	Reference Std.	Test Condition
4.1.	Vibration Test	DIN EN 60068-2-6	10~55Hz, 0.75mm Peak; 55~2000Hz, 10g Peak. 10 Cycles; 3 axis; 1Oct./min.
4.2.	Thermal Shock	DIN EN 60068-2-14	30 min. @each temperature 10 cycles, Transfer<1min.; -40°C +/-3°C; 85°C +/-3°C
4.3.	Mechanical Shock	DIN EN 60068-2-27	6 shocks per axis, 100g; 6ms both directions

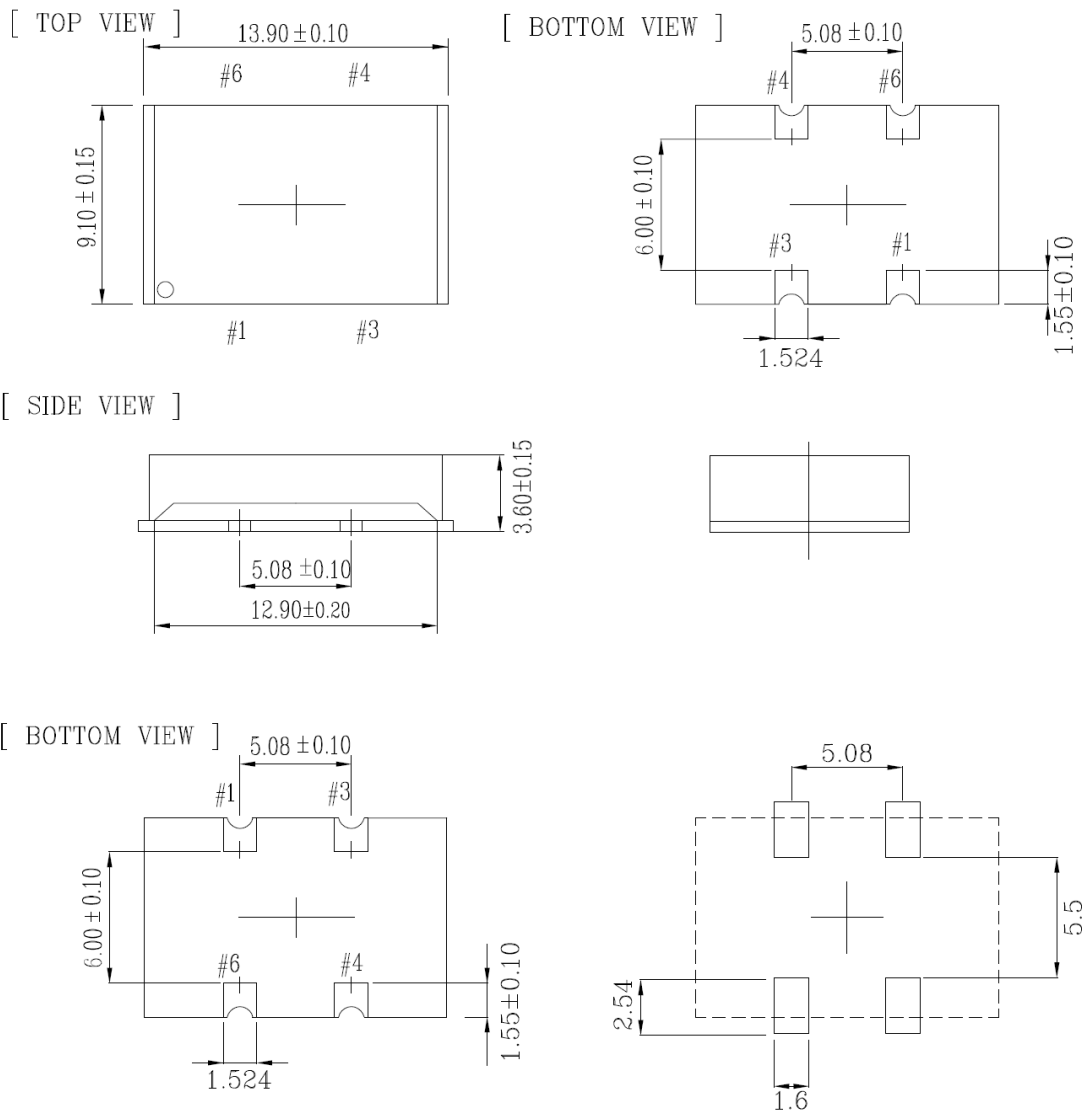
Table 1 : ORDERING INFORMATION

-20°C ~ +70°C	VLCUWCWTFN-Frequency
-40°C ~ +85°C	VLCUWLWTFN-Frequency

PHASE NOISE TEST DATA



OUTLINE DRAWING



Pin FUNCTIONS

Pin	Function
#1	Vcon
#2	GND
#3	Output
#4	VDD

PRODUCT IDENTIFICATION (MARKING)

