

Features

- Ultra Stable
- Low Phase Noise
- SMD Package(9.2×14.2mm)

Applications

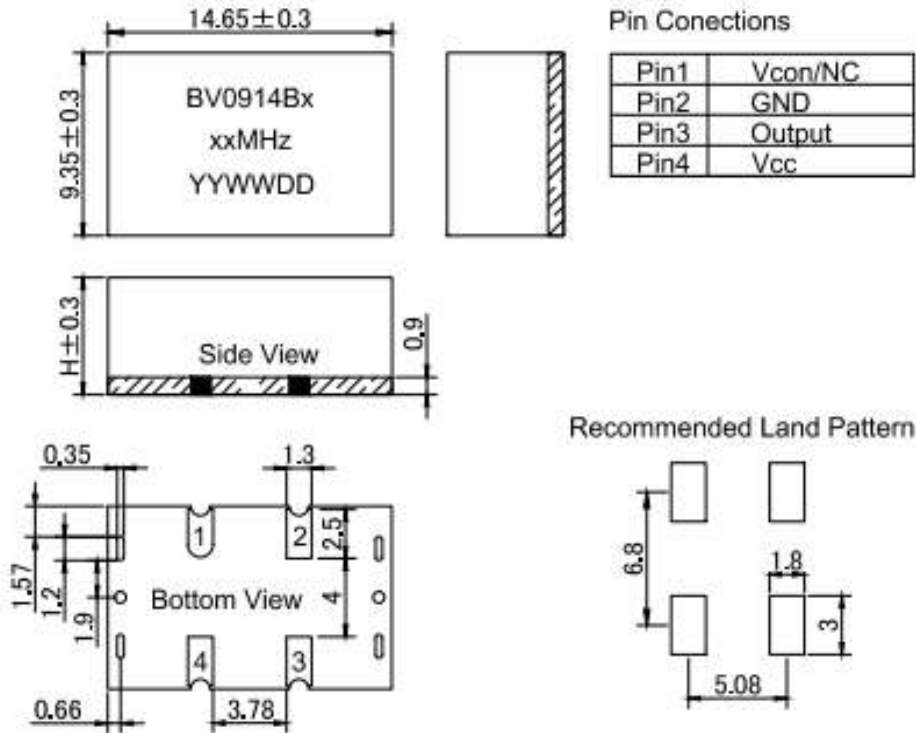
- Low phase noise signal source
- Wireless Communication System
- Low jitter RF Communication
- GNSS



BV0914B Series Specifications

Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	-	3.3	-	V	Vcc±5%	
	-	5	-	V	Vcc±5%	
Output Current	-	30	-	mA		
Frequency Range	40 ~ 150			MHz		
Nominal Frequency	80;100;120;122.88			MHz		
Freq. Stability Vs. Temp.	±10	±12	±15	ppm	-40°C~+85°C	
CMOS	V _{OH}	2.4	-	-	V	CMOS Output, Load=15pf
	V _{OL}	-	-	0.4	V	CMOS Output, Load=15pf
	Duty Cycle	45	50	55	%	
	Rise/Fall Edge	-	-	6	ns	90%~10% Vdd
	Load	-	-	15	pf	
Sine Wave	Output Level	7	-	-	dbm	
	Harmonious			-30	dBc	
	Spurious			-70	dBc	
	Load	50ohm				
RMS Jitter(By E5052B)	20	-	40	fs	12KHz~5MHz	
Supply Sensitivity	-	-	+0.2	ppm	Supply voltage varied ±5% at 25°C	
Load Sensitivity	-	-	+0.2		±5% load change	
Aging/ First Year	-	-	±1.0			
SSB Phase Noise @100MHz	-	-80	-75	dBc/Hz	Offset 10Hz	at 25°C
	-	-112	-110		Offset 100Hz	
	-	-142	-140		Offset 1kHz	
	-	-158	-155		Offset 10kHz	
	-	-160	-160		Offset 100kHz	
Control Voltage	0~3.3			V		
Frequency Turning Range	±20	±30	±40	ppm	At shipment, nominal EFC, +25°C	
Tuning Slope	Positive					
Linearity	-	-	10	%		
Environmental Conditions						
Operating Temperature	-40°C ~ +85°C					
Storage Temperature Range	-55°C ~ +105°C					

Outline Dimension & Pin Connections



Maximum Ratings

Parameter	Symbol	Rating
Supply Voltage	Vdd	-0.5V / 6V
Control Voltage	Vcon	0V / 3V
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V

Reliability

Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solder Ability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RHOS Directive 2011/65/EU Annex II Recasting 2002/95/EC

Ordering Guide

BV 0914B X X X X X X X X X X X X . X X

Product:
VCXO

Outline:
14.65mm×9.35mm

Output:
H: CMOS
S: Sine Wave

Supply Voltage:
3: 3.3 V
5: 5.0 V

Frequency in MHz

Tuning Range:
XXXN: XXX ppm Min.
eg: 020N

Phase Noise:
C: -130dBc/Hz@1kHz
D: -135dBc/Hz@1kHz
E: -140dBc/Hz@1kHz

Stability vs. Temp.
155: ±15ppm

Temp. Range:
C: -20°C ~ +70°C
I: -40°C ~ +85°C

Example: BV0914BH5I155E010N100