

Features

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

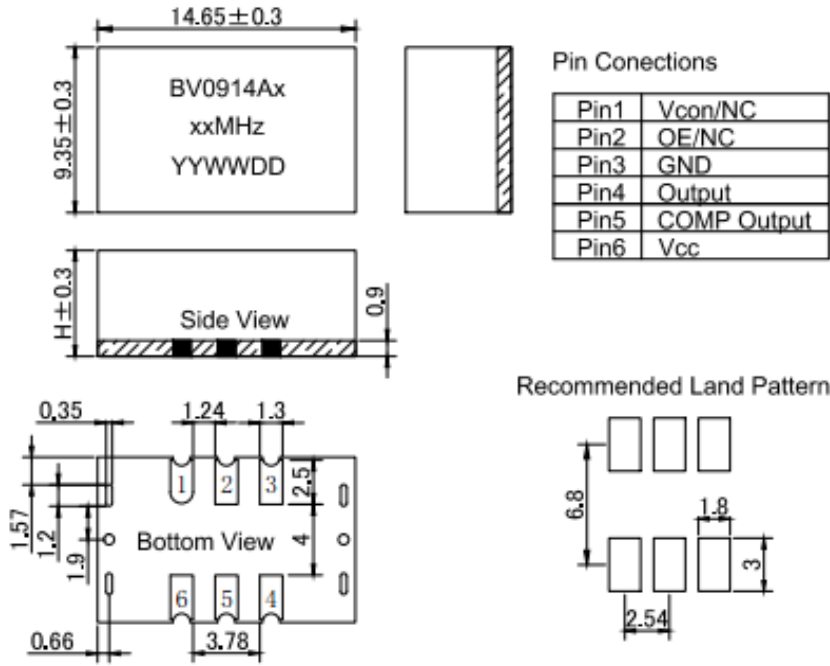
Applications

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


BV0914A Series Specifications

Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	-	3.3	-	V	V _{cc} ±5%	
	-	5	-	V	V _{cc} ±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	
LVPECL	V _{OH}	1.86	-	2.11	V	CMOS Output, Load=15pf
	V _{OL}	1.06	-	1.31	V	CMOS Output, Load=15pf
	Duty Cycle	45	50	55	%	
	Rise/Fall Edge	-	0.2	1	ns	20%~80% V _{dd}
	Load	-	-	50	Ω	V _{cc} -2V or equivalent Kelvin Connections
LVDS	V _{pp}	250	350	450	dbm	
	V _{os}	1.125	1.25	1.375	dBc	
	Duty Cycle	45	-	55	dBc	(V _{OH} - V _{OL})/2
	Rise/Fall Edge	-	0.2	1	ns	20%←→80%
	Load	-	-	100	Ω	
OE Function	Enable	2			V	Pin 2 no connection or V _{dd} > 2V
	Disable			0.4	V	
RMS Jitter(By E5052B)	200	-	700	fs	12KHz~5MHz@100MHz	
Supply Sensitivity	-	-	+0.2	ppm	V _{cc} ±5%	
Load Sensitivity	-	-	+0.2		±5% load change	
Aging/ First Year	-	-	±1.0			
SSB Phase Noise @100MHz	-	-78	-75	dBc/Hz	Offset 10Hz	at 25°C
	-	-112	-110		Offset 100Hz	
	-	-140	-135		Offset 1kHz	
	-	-150	-145		Offset 10kHz	
	-	-155	-150		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



* Height 4mm or 6mm is available and 2.5mm can be customized.

Maximum Ratings

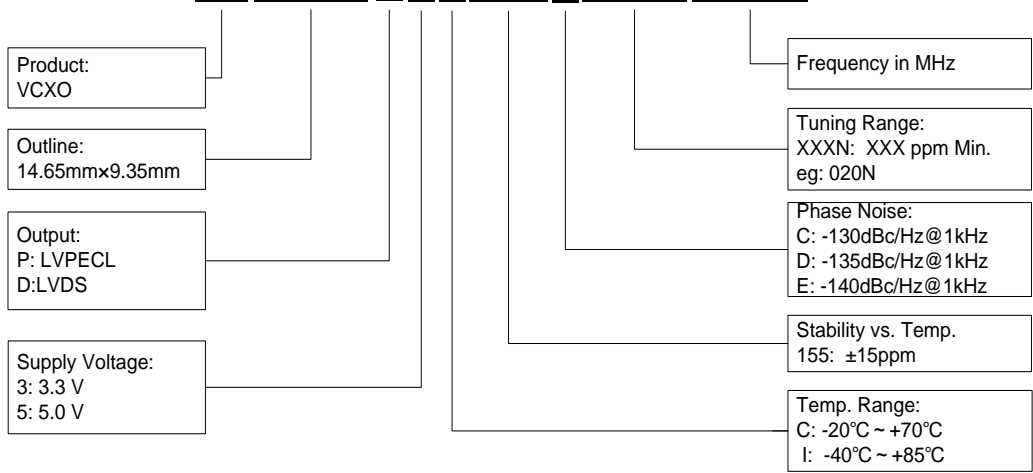
Parameter	Symbol	Rating
Supply Voltage	Vdd	-0.5V / 6V
Control Voltage	Vcon	0V / 3V
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V

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 0914A XXXXXXXXXXXX XX.XX



Example: BV0914AP5I155D010N100