

## Features

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

## Applications

- Base Stations
- Instrumentations
- Synthesizer
- SDH/SONET



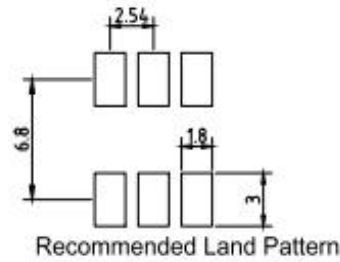
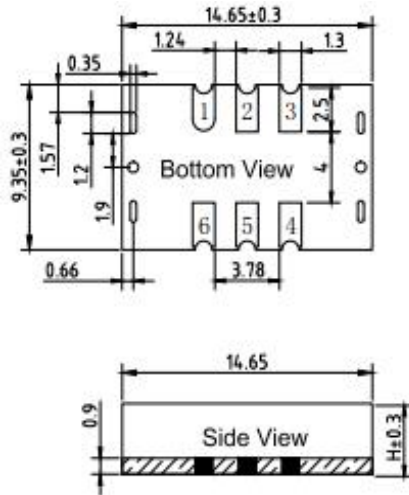
### BT0914A Series Specifications

Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	-	3.3	-			
	-	5	-	V		
Current with Output	-	-	45	mA		
Frequency Range	60~ 155.62			MHz		
Nominal Frequency	75,80,96,100,102.4,120,122.88,125			MHz		
Initial Frequency Tolerance	±0.3	±0.5	±1	ppm	At shipment, nominal EFC, +25°C	
Freq. Stability Vs. Temp.	±0.28	±1	±2	ppm	-20°C~+70°C	
	±0.5	±1	±2	ppm	-40°C~+85°C	
	±0.1	±0.2	±0.28	ppm	-40°C~+85°C(*Height: 6mm)	
Sine wave	Output Level	7	-	-	dBm	
	Harmonics	-	-	-30	dBc	
	Spurious	-	-	-70	dBc	
	Load	-	50	-	Ω	
HCMOS	V <sub>OH</sub>	2.4	-	-	V	HCMOS Output, Load=15pf
	V <sub>OL</sub>	-	-	0.4	V	HCMOS Output, Load=15pf
	Duty Cycle	45	-	55	%	(V <sub>OH</sub> - V <sub>OL</sub> )/2
	Rise/Fall Edge	-	-	6	ns	HCMOS Output, Load=15pf
	Load	-	-	15	pf	
RMS Jitter(By E5052B)	20	-	40	fs	12KHz~5MHz	
Supply Sensitivity	-	-	±0.1	ppm	V <sub>CC</sub> ±5%	
Load Sensitivity	-	-	±0.2		Load±5%	
Aging/ First Year	-	-	±1.0		Standard	
SSB Phase Noise @100MHz	-	-77	-75	dBc/Hz	Offset 10Hz	At +25°C
	-	-110	-110		Offset 100Hz	
	-	-142	-140		Offset 1kHz	
	-	-158	-155		Offset 10kHz	
	-	-163	-158		Offset 100kHz	
Control Voltage Range	1.5 ± 1.0			V		
Frequency Turning Range	±3	±5	±7	ppm		
Tuning Slope	Positive					
Linearity	-	-	10	%		

## Environmental Conditions

Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-55°C ~ +105°C

## Outline Dimension & Pin Connections



Pin Connections

Pin1	Vcont
Pin2	NC/OE
Pin3	GND
Pin4	Output
Pin5	COMP Output
Pin6	Vcc

**Note:**

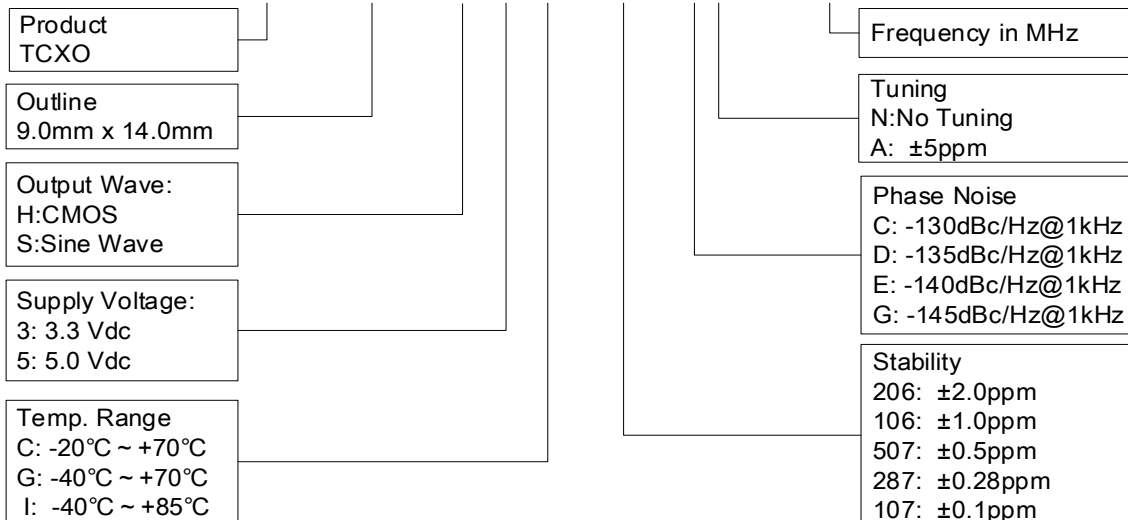
1. The pins with "\*" are for factory test.
2. Leave pin 1 unconnected if Vcon is not used.
3. The height is 6mm(min) once Frequency stability is  $\pm 0.1 \sim \pm 0.28 \text{ppm}$  @ -40~+85°C.

## 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

BT 0914A X X X XXX X X XX.XX



**Example:** BT0914BS5I287AA100