

Features

- High Freq.
- Low Phase Noise
- SMD 9.3x14.6(mm)

Applications

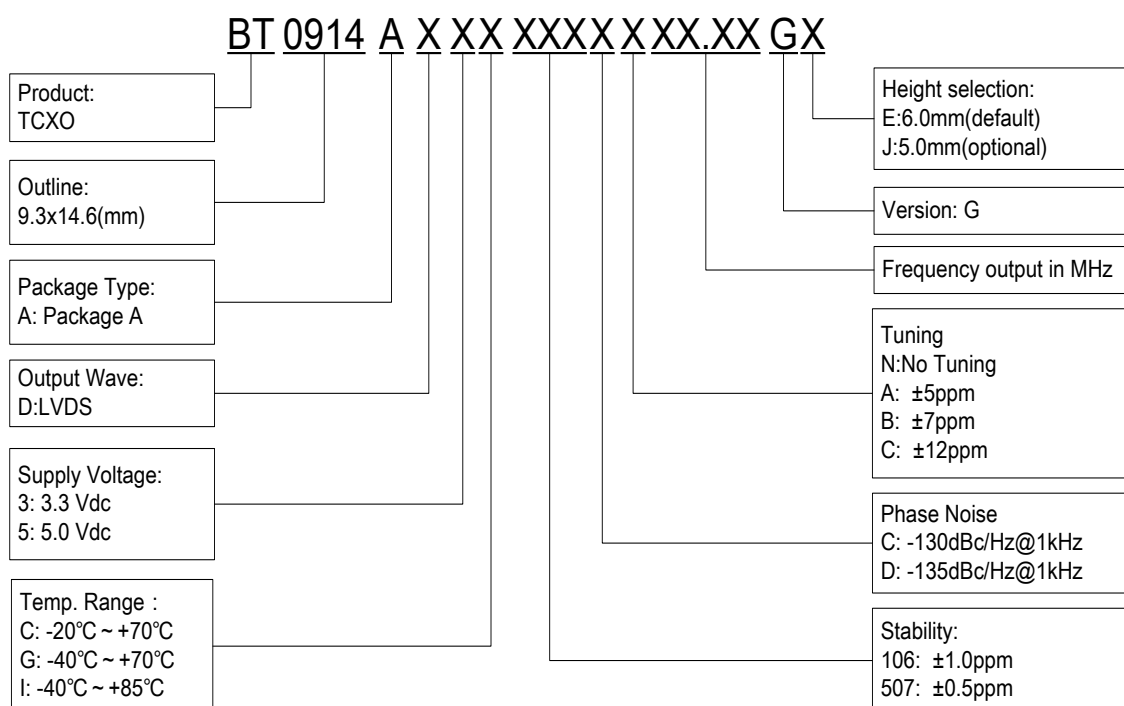
- GPS GNSS Devices
- Instrumentations
- Communication
- Signal Source
- SDH/SONET



BT0914AD LVDS Specification					Version	G	
Parameter		Value			Unit	Conditions	
		Min.	Typ.	Max.			
Supply Voltage		—	3.3	—	V	3.15V~5.5V Available	
		—	5	—	V		
Output Current		—	—	45	mA	LVDS, Loaded 100Ω	
Frequency Range		50~ 156.25			MHz		
Nominal Frequency		75,80,96,100,102.4,120,122.88,125			MHz		
初始频率精度		—	±0.5	±1.0	ppm	At shipment, nominal EFC, +25℃	
Freq. Stability Vs. Temp.		±0.28	—	±1.0	ppm	-20℃~+70℃	
		±0.28	—	±1.0	ppm	-40℃~+70℃	
		±0.28	—	±1.0	ppm	-40℃~+85℃	
		±0.50	—	±2.0	ppm	-50℃~+85℃	
LVDS	Vpp	250	350	450	mV		
	Vos	1.125.	1.25	1.375	V		
	Duty Cycle	45	—	55	%	(V _{OH} - V _{OL})/2	
	Rise/Fall Edge	—	0.2	1	ns	20%←→80%	
	Load	—	—	100	Ω		
RMS Jitter(By E5052B)		—	—	1000	fs	12KHz~5MHz	
Supply Sensitivity		—	—	±0.2	ppm	Vcc±5%	
Load Sensitivity		—	—	±0.2		Load±5%	
Aging/ First Year		—	—	±1.0		标准	
SSB Phase Noise @100MHz		—	-77	-75	dBc/Hz	Offset 10Hz	At +25℃
		—	-112	-105		Offset 100Hz	
		—	-138	-135		Offset 1kHz	
		—	-145	-140		Offset 10kHz	
		—	-148	-145		Offset 100kHz	
Control Voltage		1.5 ± 1.5			V		
Frequency Tuning Range		±5	±10	±12	ppm		
Tuning Slope		positive					
Linearity		—	—	10	%		
Phase Noise @1KHz							
Frequency Range		<-130dBc	<-135dBc	<-140dBc	<-145dBc	○=Available X= Not Available	
50~100MHz		○	○	X	X		
102.4~122.88MHz		○	○	X	X		
125~156.25MHz		○	X	X	X		
Environmental Conditions							
Operating Temperature Range		-50℃ ~ +85℃					
Storage Temperature Range		-55℃ ~ +125℃					

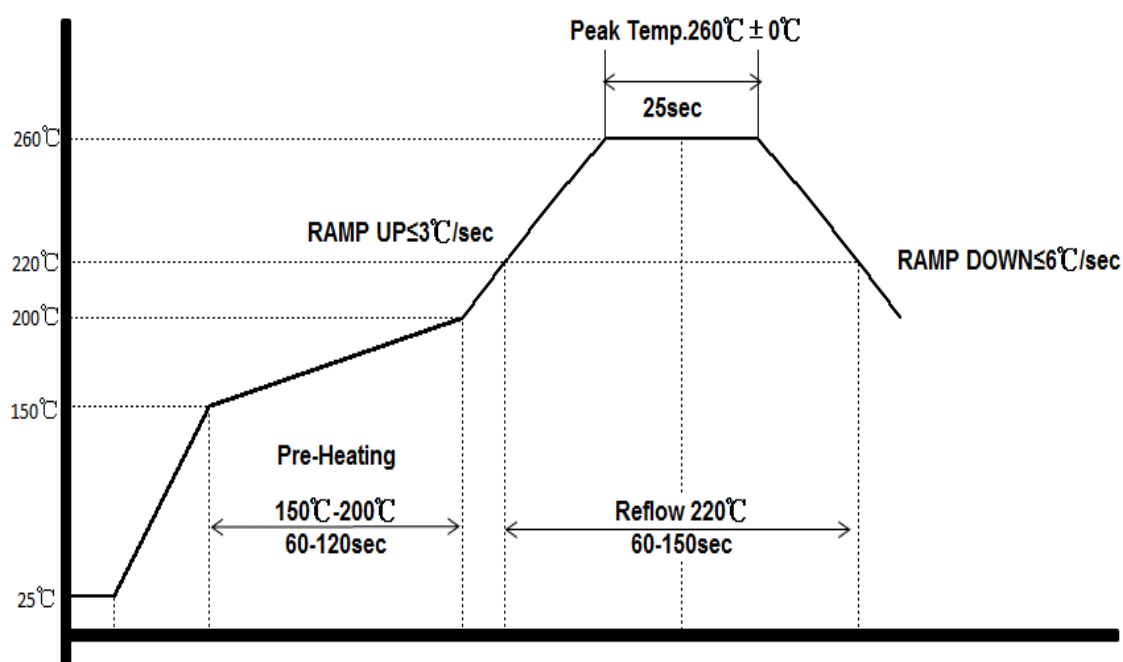
Maximum Ratings														
Parameter	Symbol	Rating												
Supply Voltage	Vcc	3.3V/5V												
Control Voltage	Vcon	0V/ 3V												
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V												
Reliability														
Parameter	Condition													
Temperature Stress Test	IEC60068, GJB360B													
Mechanical Stress Test	IEC60068, GJB360B													
EMC Test (ESD)	IEC61000, JESD22													
EMC Test (ESD)	EIA/JESD22-B102-C													
MSL	NA													
Contact Pads	Gold over Nickel													
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC													
Outline Dimension & Pin Connections														
14.6±0.3 9.3±0.3 BT0914AD xxMHz YYWWDD Side View H±0.3 1 2 3 6 5 4 1.24 1.3 2.5 3.78 4 Bottom View Pin Connections <table><tr><td>#1</td><td>NC / Vcont</td></tr><tr><td>#2</td><td>NC</td></tr><tr><td>#3</td><td>GND</td></tr><tr><td>#4</td><td>Positive Output</td></tr><tr><td>#5</td><td>Negative Output</td></tr><tr><td>#6</td><td>Vcc</td></tr></table> unit : mm Dimensional Tolerance : ±0.3 Recommended Land Pattern 2.54 1.8 3.0 9.8 Note: Leave NC unconnected If Vcon is not used.			#1	NC / Vcont	#2	NC	#3	GND	#4	Positive Output	#5	Negative Output	#6	Vcc
#1	NC / Vcont													
#2	NC													
#3	GND													
#4	Positive Output													
#5	Negative Output													
#6	Vcc													

Ordering Guide



例如: BT0914AD3I106DA100GE

Reflow Profile



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