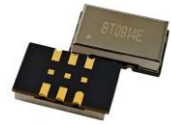


Features

- Available with any frequency from 1MHz to 250MHz
- Fast Delivery
- SMD 14.6×9.3(mm)

Applications

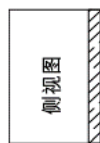
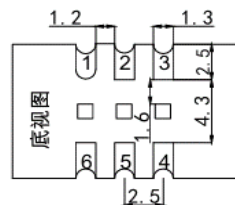
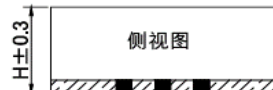
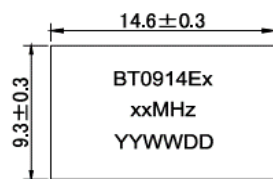
- Communication
- Industrial Equipment
- IOT
- Network Equipment



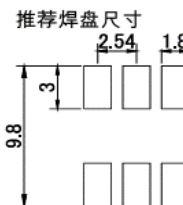
BT0914E Specification				Version	L		
Parameter		Value			Unit	Conditions	
		Min.	Typ.	Max.			
Supply Voltage		–	3.3	–	V	3.3V±5%	
Supply Current		–	–	80	mA	Loaded	
Frequency Range		1~ 250			MHz		
Nominal Frequency		10.20.95,100,122.88,156.25,200,204.8			MHz		
Initial Frequency Tolerance		±0.5	–	±2.0	ppm	At shipment, nominal	
Freq. Stability Vs. Temp.		±0.28	–	±2.0	ppm	-20℃~+70℃	
		±0.50	–	±2.0	ppm	-40℃~+70℃	
		±0.50	–	±2.0	ppm	-40℃~+85℃	
		±1.0	–	±2.0	ppm	-50℃~+90℃	
		±2.0	–	±5.0	ppm	-55℃~+85℃	
		±2.0	–	±5.0	ppm	-55℃~+95℃	
Sine Wave	Output	5	–	–	dBm		
	Harmonic Suppression	–	–	-30	dBc		
	Spur Suppression	–	–	-70	dBc		
	Load	–	50	–	Ω		
HCMOS	V _{OH}	2.4	–	–	V	HCMOS Output, Load=15pf	
	V _{OL}	–	–	0.4	V	HCMOS Output, Load=15pf	
	Duty Cycle	45	–	55	%	(V _{OH} - V _{OL})/2	
	Rise/Fall Edge	–	–	6	ns	HCMOS Output, Load=15pf	
	Load	–	–	15	pf		
RMS Jitter(E5052B)		–	–	1.5	ps	12KHz~5MHz	
Supply Sensitive		–	–	±0.2	ppm	Vcc±5%	
Load Sensitive		–	–	±0.2		Load±5%	
Aging/First Year		–	–	±1.0		Standard	
SSB Phase Noise @200MHz		–	-75	-70	dBc/Hz	Offset 10Hz	At +25℃
		–	-95	-90		Offset 100Hz	
		–	-116	-115		Offset 1kHz	
		–	-135	-130		Offset 10kHz	
		–	-145	-140		Offset 100kHz	
Control Voltage Range		1.5 ± 1.5			V		
Frequency Tuning Range		±5	–	±12	ppm		
Tuning Slope		Positive					
Linearity		–	–	10	%		
Phase Noise@1KHz							
Frequency Range		<-125dBc	<-130dBc	<-135dBc	<-140dBc	○=Available X= Not Available	
1≤F ₀ ≤10MHz		○	○	○	○		
10.23≤F ₀ ≤21MHz		○	○	○	X		
21.25≤F ₀ ≤40MHz		○	○	X	X		
40.96≤F ₀ <80MHz		○	X	X	X		
Phase Noise@1KHz							
Frequency Range		<-115dBc	<-120dBc			○=Available X= Not Available	
80≤F ₀ <160MHz		○	○				
160≤F ₀ ≤250MHz		○	X				
Environmental Conditions							
Operating Temperature Range		-55℃ ~ +95℃					
Storage Temperature Range		-55℃ ~ +125℃					

Maximum Ratings		
Parameter		Rating
Supply Voltage	Vcc	3.3V
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	

Outline Dimension & Pin Connections



引脚	功能
#1	悬空/压控
#2	悬空
#3	接地
#4	信号输出
#5	悬空
#6	电源



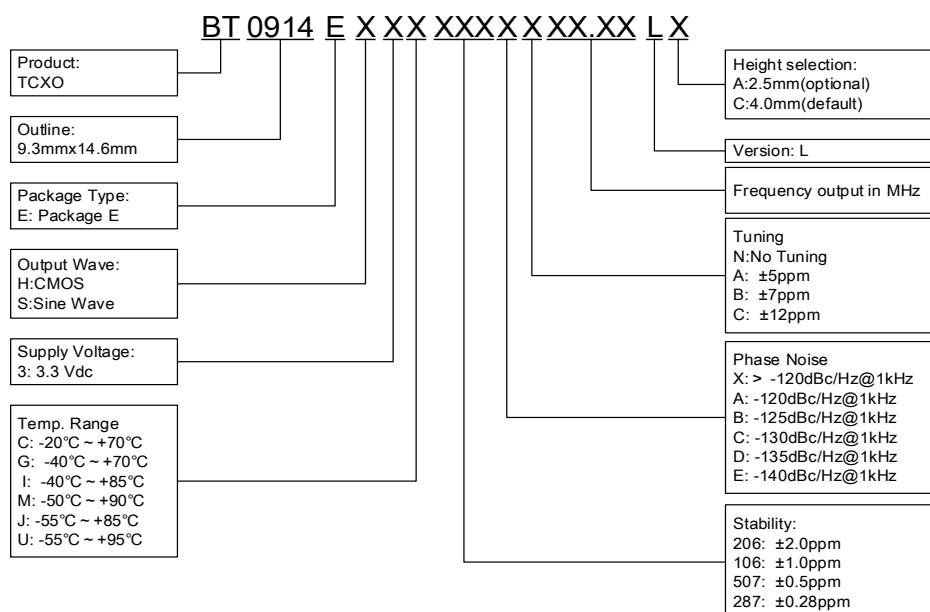
单位 : mm
误差:±0.3

Pin Connections

#1	NC/VCON
#2	NC
#3	GND
#4	OUTPUT
#5	NC
#6	VCC

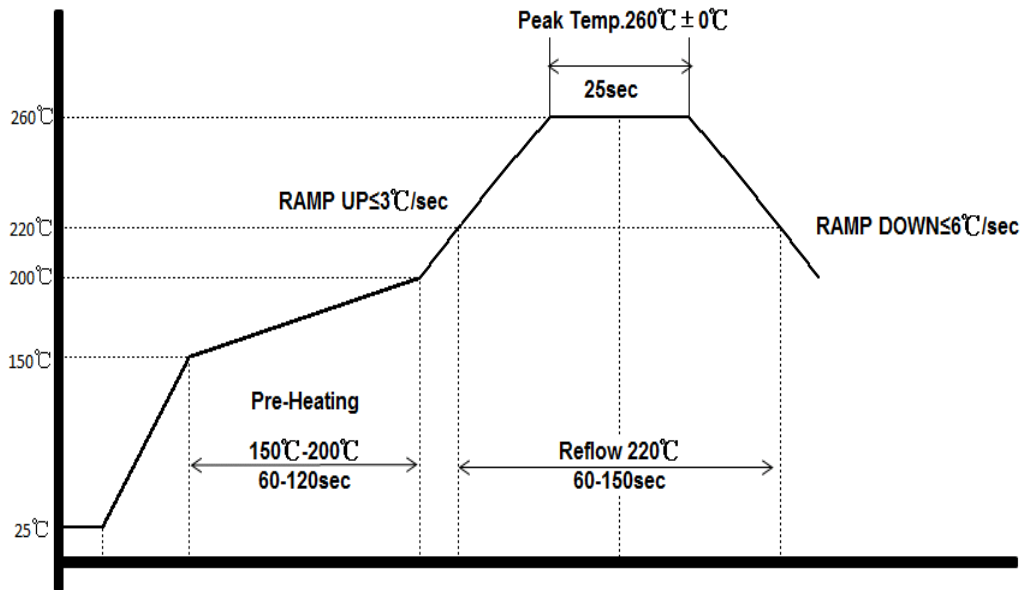
Note: Leave NC no connection. Unit:mm

Ordering Guide



Example: BT0914EH3C106XN200LC

Reflow Profile



Disclaimer

XtalTQ Technologies Co., Limited reserves the right to make changes to the product(s) and/or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.