

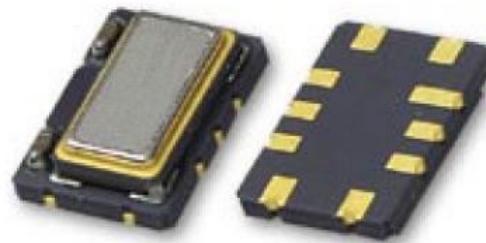
## TCXO3404-19.2MHz-A

+/- 4.6 PPM overall stability over 20 yrs

## Features

Frequency 19.2 MHz  
7mm x 5mm x 1.85mm ceramic SMD  
+/- 4.6 ppm total stability over 20 years  
CMOS output  
Tri-state Enable / Disable Function  
+/- 0.50 ppm from -40 to +85 centigrade degree

## Picture of Part



## Typical Applications

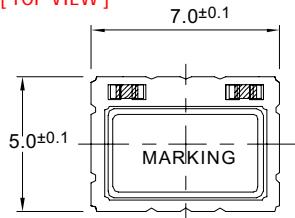
Base stations  
10 G-bit ethernet  
SONET  
GSM, CDMA, 3G, and 4G cellular

## Description

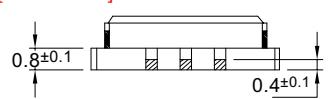
The TCXO3404 family offers low noise compensation techniques combined with aggressive conditioning processes resulting in outstanding long term stability , tightly distributed performance parameters, and superior long term reliability

## Physical Dimensions

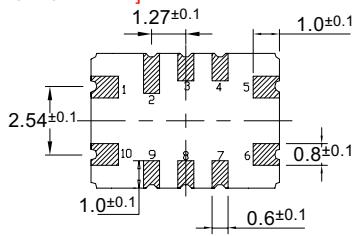
[ TOP VIEW ]



[ SIDE VIEW ]



[ BOTTOM VIEW ]



Recommended Soldering Pattern

## Pin Connections

Pad	Function
1	VCON : VC-TCXO NC : TCXO
2	NC
3	NC
4	NC
5	GND
6	CMOS/ Clipped Sinewave Output
7	NC
8	NC
9	Tri-State Control*
10	VDD

## Specification

TCXO Specification	Sym.	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
<b>Operational Frequency Range</b>	$f_0$			19.200		MHz	
Load	Load				15	pF	
	H - level voltage	$V_H$	0.9Vcc			V	
	L - level voltage	$V_L$		0.1Vcc		V	
	Rise & Fall time					ns	
	Duty cycle		45		55	%	
<b>Power supply</b>							
Voltage	Vcc		3.135	3.300	3.465	V	5.0 V option available
Current consumption	Icc			6.0	mA	square wave	
<b>Frequency stability</b>							
vs. temperature		-40 °C to +85 °C, ref 25 °C	-0.500		+0.500	ppm	
vs. 5% change in supply voltage		ref Vcc typ.	-0.300		+0.300	ppm	
Tolerance at 25C			-2.000		+2.000	ppm	Frequency 1 hr after reflow
<b>SSB Phase noise @19.2 MHz CMOS typical</b>		100 Hz	-120			dBc/Hz	
		1000 Hz	-140				
		10 kHz	-148				
Tri-state		Output OFF		0.3Vcc			
Enable   Disable		Output ON	0.7Vcc				
Total Tolerance	Over 20 years	Projected after 30 days operation	-4.600		+4.600	ppm	
<b>Environmental, mechanical conditions.</b>							
Operating temperature range		<b>-40 °C to +85 °C maximum range available that is standard</b>					
Storage temperature range		<b>-55 °C to +125 °C</b>					
Mechanical shock							
Vibration							
Soldering							