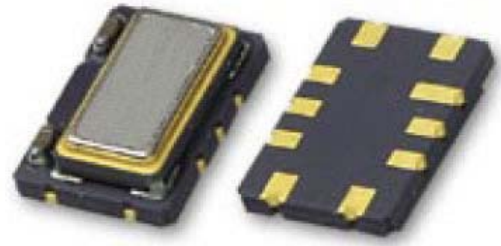


**Features**

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**

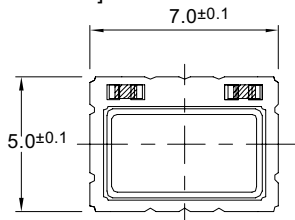
Base stations  
 10 G-bit Ethernet  
 SONET  
 GSM, CDMA, 3G, and 4G cellular

**Description**

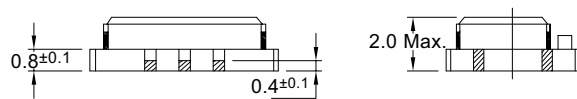
The TCXO3404 family offers low noise compensation techniques combined with aggressive conditioning processes resulting in outstanding long term stability, tightly distributed performance parameters, and superior long term reliability.

**Mechanical Drawing and PIN Connections**

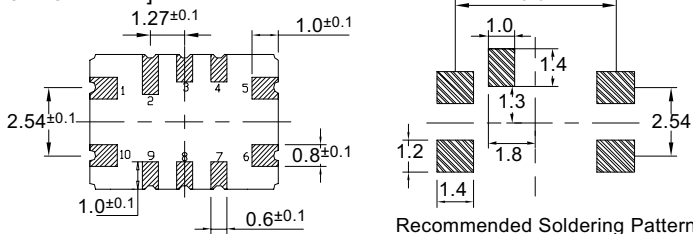
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



Recommended Soldering Pattern

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				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 @12.8 MHz CMOS typical</b> Tri-state Enable   Disable		100 Hz			-120	dBc/Hz	
		1000 Hz			-140		
		10 kHz			-148		
		Output OFF			0.3Vcc		
		Output ON	0.7Vcc				
Total Tolerance	Over 20 years	Projected after 30 days operation	-4.600		+4.600	ppm	See NOTE 1 on Page 3
<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							