Features
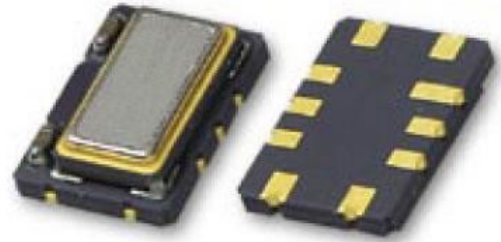
Frequency 12.8 MHz
7mm x 5mm x 1.85mm ceramic SMD
+/-- 4.6 ppm total stability over 20 years
CMOS output
Tri-state Enable / Disable Function
+/-- 0.50 ppm from -40 to +85 centigrade degree
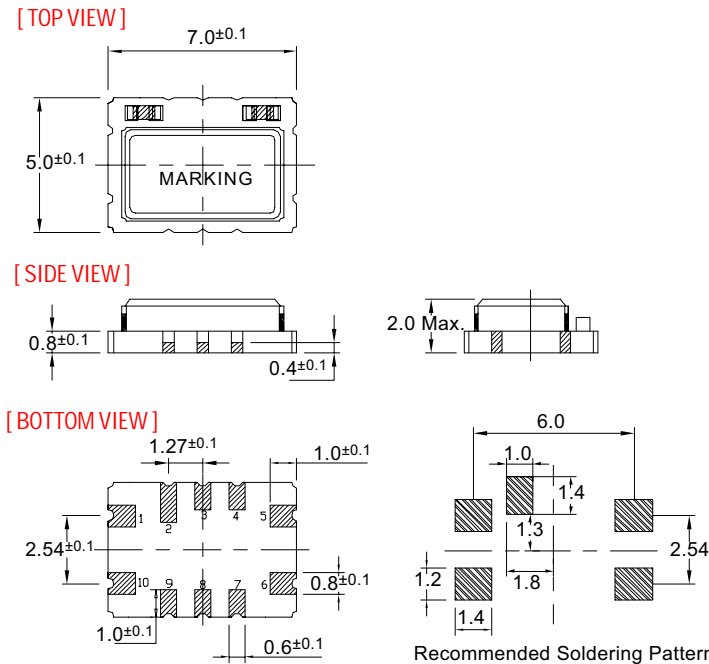
Picture of Part

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]

7.0±0.1
5.0±0.1
MARKING

[SIDE VIEW]

0.8±0.1
0.4±0.1
2.0 Max.

[BOTTOM VIEW]

1.27±0.1
1.0±0.1
2.54±0.1
0.8±0.1
1.0±0.1
0.6±0.1

6.0
1.0
1.4
1.3
2.54
1.2
1.8
1.4

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	V_{DD}

Specification

TCXO Specification		Sym.	Condition	Value Min.	Value Typ.	Value Max.	Unit	Note
Operational Frequency Range		f_0			12.800		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	%	
Power supply								
Voltage		Vcc		3.135	3.300	3.465	V	5.0 V option available
Current consumption		Icc				6.0	mA	square wave
Frequency stability								
vs. temperature			-40℃ to +85℃, ref 25℃	-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
SSB Phase noise @12.8 MHz CMOS typical			10 Hz		-90		dBc/Hz	
			100 Hz		-120			
			1 KHz		-140			
			10 KHz		-148			
Total Tolerance	Over 20 years		Projected after 30 days operation	-4.600		+4.600	ppm	
Environmental, mechanical conditions.								
Operating temperature range			**-40℃ to +85℃ maximum range available that is standard**					
Storage temperature range			**-55℃ to +125℃**					
Tri-state			Output OFF : Less than 30% of Vcc					
Enable / Disable			Output ON : Greater than 70% of Vcc ; or do NOT connect					