

## TCX03425

High Volume High Performance TCXO

### Features

Frequency 12.8 MHz  
7mm x 5mm x 2.00 mm ceramic SMD  
CMOS output  
+/- 0.50 ppm from -40°C to 85°C

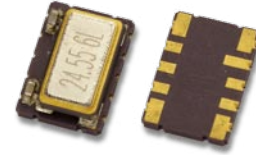
### Typical Applications

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

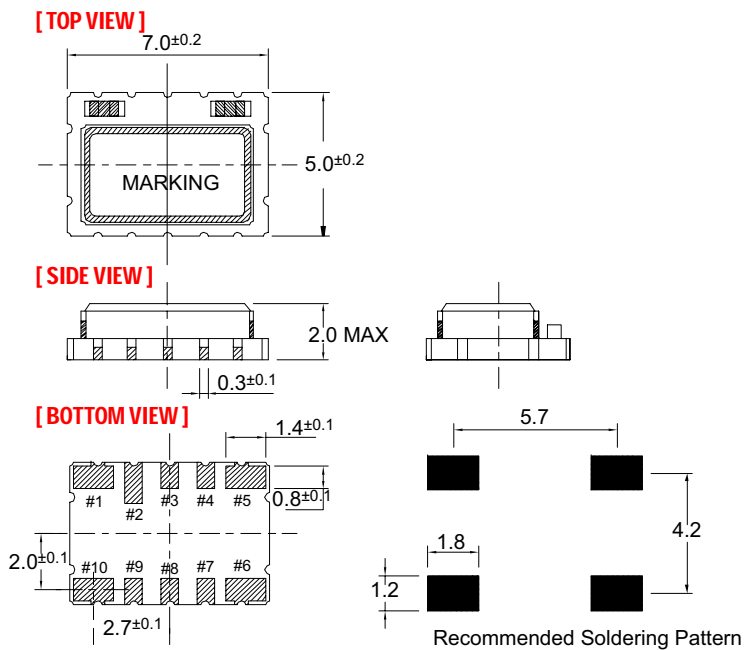
### Description

The TCXO3425 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

### Picture of Part



### Physical Dimensions



### Pin Connections

Pin	Function
#1	VCON : VCTCXO GND : TCXO
#2	NC
#3	NC
#4	NC
#5	GND
#6	Output
#7	NC
#8	NC
#9	NC
#10	VDD

**Specification**

TCXO Specification		Sym.	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
<b>Operational Frequency Range</b>		f <sub>0</sub>			12.8		MHz	
HCMOS	Load					15	pF	
	H - level voltage	V <sub>H</sub>		0.9V <sub>cc</sub>			V	
	L - level voltage	V <sub>L</sub>				0.1V <sub>cc</sub>	V	
	Rise & Fall time					10	ns	
	Duty cycle			45		55	%	
<b>Power supply</b>								
Voltage		V <sub>cc</sub>		2.800		3.465	V	
Current consumption		I <sub>cc</sub>				6.0	mA	square wave
<b>Frequency control*</b>								
N/A			**This is a clock TCXO Requirement					
<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 V <sub>cc</sub> 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			100 Hz			-120	dBc/Hz	
			1000 Hz			-140		
			10 kHz			-148		
Total Tolerance	After 1 year		Projected after 30 days operation	-1.000		+1.000	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								

## Ordering Information

TCXO3425

NOTE 1 : Total Frequency Tolerance is inclusive of calibration at 25°C, change over temperature, change with 5% supply variation, change with 5% load change, change with reflow soldering, and 20 year aging.