

TCXO3405

Miniature High Stability TCXO

Features

- Frequency Range 10 to 40 MHz
- 5mm x 3.2mm x 1.15mm ceramic SMD
- Compact and lightweight
- Low power consumption
- Low cost / excellent stability

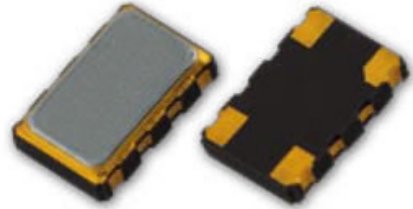
Typical Applications

- WLAN / WiMAX
- Automatic Meter Reading

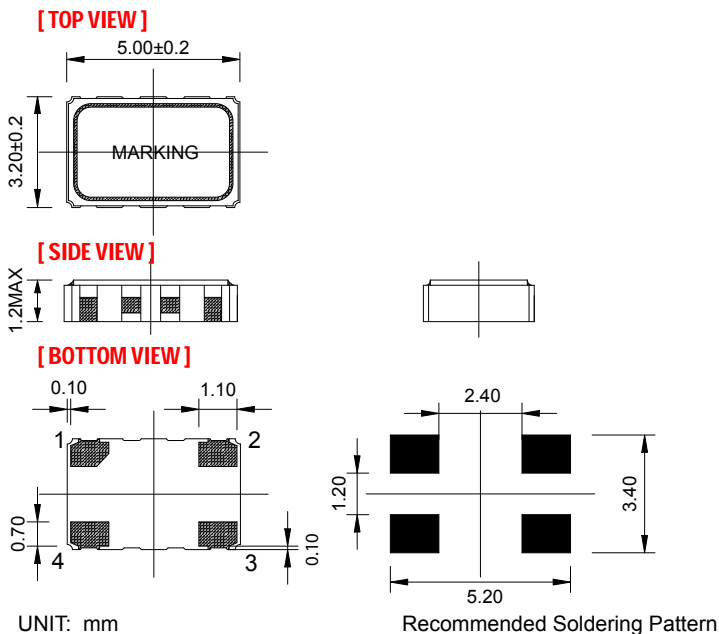
Description

The TCXO3405 family offers low noise compensation techniques combined with high volume manufacturing processes resulting in low cost , tightly distributed performance parameters, and very good overall long term frequency stability and reliability.

Picture of Part



Physical Dimensions



Pin Connections

Pin	Function
1	VCON : VCTCXO GND : TCXO
2	GND
3	OUTPUT
4	VDD

TCXO3405

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Specification

TCXO Specification		Sym.	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		f_0		10		40	MHz	
	Load						pF	
	H - level voltage	V_H					V	
	L - level voltage	V_L					V	
	Rise & Fall time						ns	
	Duty cycle						%	
Clipped Sine-wave ONLY	Level	L		0.8			pk-pk	
	Load Resistance	R_L			10		Kohm	
	Load Capacitance	C_L			10		pF	
Power supply								
Voltage		V_{cc}		2.660	2.800	2.940	V	
Current consumption		I_{cc}				2.5	mA	
Frequency control*								
Control voltage range		V_c		0.5	1.5	2.5	V	Positive tuning slope
Tuning range				+/- 5			ppm	
Vc Input Impedance				1			Mohm	
Frequency stability								
vs. temperature			-40°C to +85°C, ref 25°C	-1.0		+1.0	ppm	0.5 ppm available case by case
vs. 5% change in supply voltage			ref Vcc typ.	-0.200		+0.200	ppm	
Tolerance at 25C				-2.0		+2.0	ppm	Frequency 1 hr after reflow
SSB Phase noise @13MHz clipped sine wave			10 Hz				dBc/Hz	
			100 Hz		-115			
			1 kHz		-135			
			10 kHz		-148			
			100 kHz					
Aging	Per Year		Projected yearly aging after 30 days operation	-1.0		+1.0	ppm	
Environmental, mechanical conditions.								
Operating temperature range		-40°C to +85°C maximum range available that is standard						
Storage temperature range								
Mechanical shock								
Vibration								
Soldering								

Ordering Information

TCXO3405-XX.XXXXXX-W

1. Field " XX.XXXXXX " is the Output Frequency to six decimals in MHz
2. Field " W " is Operating Temperature Range and Freq. Stability :
 - a. " 0 " for -20 °C to +70 °C and +/- 0.500 ppm
 - b. " 1 " for -20 °C to +70 °C and +/- 1.000 ppm
 - c. " 2 " for -40 °C to +85 °C and +/- 1.000 ppm

***NOT all choices in section 2 available : Must consult factory for specific frequency and stability combination.

Part Number Example

TCXO3405-10.000000-2

10.000000 MHz Operating Frequency

Operating Temperature of -40 °C to +85 °C

+/- 1.000 ppm Frequency Stability