

TCXO3200T

Temperature Controlled Crystal Oscillator

Features

10 to 40 MHz
Supply Voltage Range (1.8 to 5.0 V)
3.2 mm x 2.5 mm x 1.2 mm ceramic SMD
Compact and lightweight
As Good as 1 PPM Stability

Standard Frequencies (MHZ)

12, 13, 13.56, 13.824, 14.745600, 15.36, 16, 16.384
19.2, 19.68, 20.0, 24.5535, 24.576, 25, 26, 32, 40

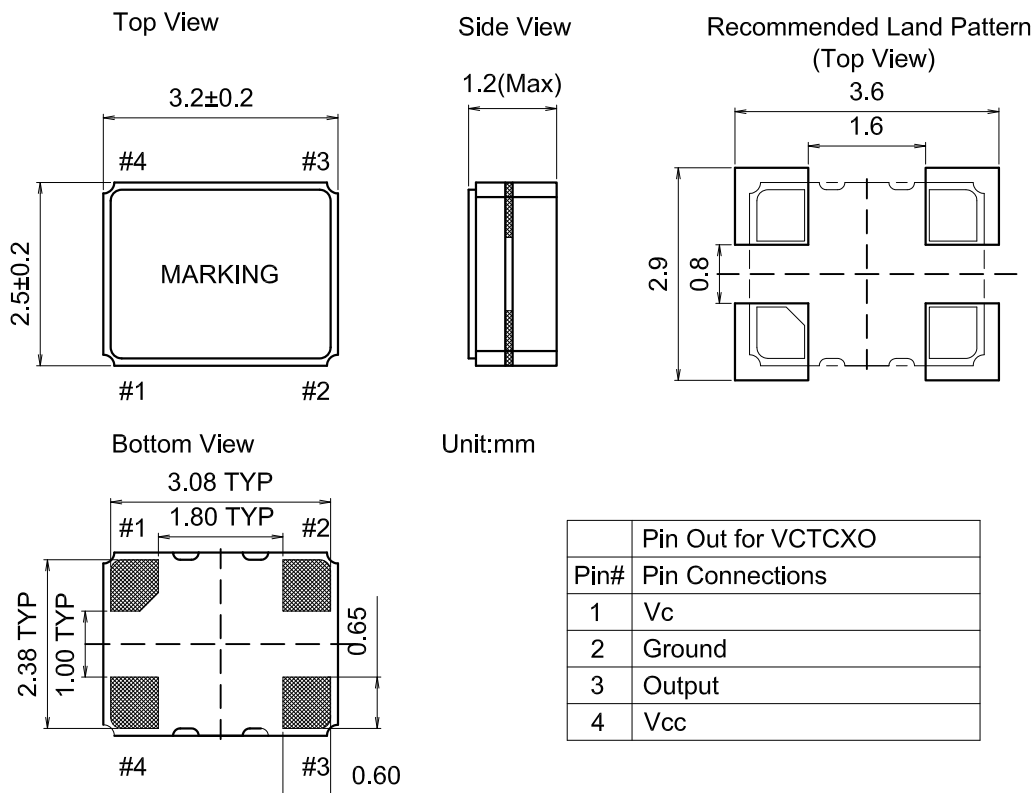
Typical Applications

Wireless / Satellite Communications / GPS
WLAN / WiMAX / WIFI
SONET / SDH / ATM

Description

The TCXO3200T family offers lower cost, a wide frequency range, and a low noise design architecture suitable for GPS and wireless applications.

Physical Dimensions & Pin Connections



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Specification

TCXO Specification		Sym.	Condition	Value			Unit	Note
Operational Frequency Range		f ₀		Min.	Typ.	Max.	MHz	
Clipped Sine	Load					10 10	pF Kohm	
	Output Level			0.8			Volts	Peak to peak minimum
Power supply								
Voltage		V _{cc}		3.150	3.300	3.450	V	Range of 1.8V to 5.0V available
Current consumption		I _{cc}				2.0	mA	
Frequency control*								
Control voltage range		V _c		0.4	1.4	2.4	v	Positive tuning slope
Tuning range				+/- 3.0		+/- 7.0	ppm	
Frequency stability								
vs. temperature			-40°C to +85°C, ref 25°C	-1.0		+1.0	ppm	**Best Stability available
vs. 5% change in supply voltage			ref V _{cc} typ.	-0.200		+0.200	ppm	
Tolerance at 25C			25C +/- 2C with V _{control} 1.4V	-2.0		+2.0	ppm	Frequency after reflow
SSB Phase noise			1KHz			-130	dBc/Hz	
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			-40°C to 85°C					

Ordering Information

TCXO3200T-XX.XXXXXX-W-Y-Z

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 -30°C to +75°C and +/- 0.500 ppm
 - b. "1" for -30°C to +75°C and +/- 1.000 ppm
 - c. "2" for -30°C to +85°C and +/- 0.500 ppm
 - d. "3" for -30°C to +85°C and +/- 1.000 ppm
 - e. "4" for -40°C to +85°C and +/- 0.500 ppm
 - f. "5" for -40°C to +85°C and +/- 1.000 ppm
 - g. "6" for -40°C to +85°C and +/- 2.000 ppm
 - h. "7" for -40°C to +75°C and +/- 2.500 ppm
 - i. "8" for -40°C to +85°C and +/- 2.500 ppm
 - j. "9" for -30°C to +70°C and +/- 1.500 ppm
 - k. "10" for -30°C to +70°C and +/- 1.000 ppm
 - l. **** NOT all frequencies available with option 3 and 4**
 - m. **Please consult factory**
3. Field "Y" is Power Supply Option
 - a. "0" for 3.00 V +/- 5%
 - b. "1" for 2.85 V +/- 5%
 - c. "2" for 5.00 V +/- 5%
 - d. "3" for 3.30 V +/- 5%
4. Field "Z" is TCXO (clock) or VCTCXO (voltage control)
 - a. "0" for TCXO
 - b. "1" for VCTCXO

Part Number Example

TCXO3200T-26.000000-3-0-1

26.000000 MHz Operating Frequency

Operating Temperature of -30°C to +85°C

+/- 1.000 ppm Frequency Stability

3.0 V +/- 5% supply

VCTCXO option (voltage-controlled frequency adjust)