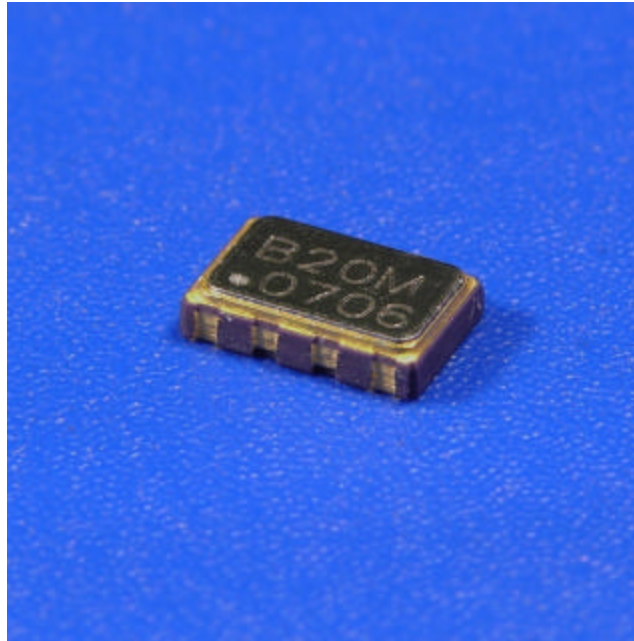


# 3.2 x 5 mm TCVCXO T105B Series

## Description:

The T105B Temperature Compensated Crystal Oscillator (TCXO) Series products provide a CMOS output in two different in temperature stabilities and temperature ranges. This low power compact 3.2mm x 5mm package is ideal for automatic assembly operations.



## Features:

- Available in select frequencies from 5 to 50 MHz.
- 2.5VDC and 3.3VDC Supply Voltage available.
- Tri-State Control
- Industry Standard CMOS output
- Standard 3.2 x 5 mm ceramic SMD package
- RoHS-6 Lead-free compliant

## Frequency Range, Operating Temperature, and Frequency Stability:

Frequency Range	Operating Temperature	Product Code	Frequency Stability	Product Code
5 to 50 MHz	-20 to +70° C	<b>C</b>	+/- 2.5 ppm	<b>E</b>
	-40 to +85° C	<b>D</b>	+/- 5.0 ppm	<b>F</b>
Frequency Tolerance at Room Temperature:			± 3.0 ppm	
Frequency Stability vs. Supply Voltage (±5% Change):			± 0.5 ppm	
Start Time			2 mSec max	

\*\* Note: ±2.5ppm is not available over the -40 to +85° C temperature range. For other frequency stabilities and temperature ranges, consult Bliley Sales.

## Aging: (typical at 10 MHz after 30 days continuous operation)

Frequency	Timeframe	Aging	Product Code
10 MHz	1st Year	+/- 1.0 ppm	<b>N/A</b>

## Phase Noise:

13.0 MHz	Offset	Phase Noise (Typ.)	Product Code
		100 Hz	-100 dBc/Hz
1 KHz	-125 dBc/Hz		
10 KHz	-143 dBc/Hz		
100 KHz	-145 dBc/Hz		

### Supply Voltage (VDD) and Current:

Power Supply (Vs)	+2.5 Vdc +/-5%	+3.3 Vdc +/-5%
<b>Product Code</b>	<b>C</b>	<b>D</b>
Supply Current (max)		
Freq: 5MHz to 20MHz	3.0 mA	
Freq: 20MHz to 50MHz	5.0 mA	

### Environmental:

Storage Temperature	-55 to +125° C
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### Output Waveform:

CMOS	
<b>Product Code</b>	<b>N/A</b>
Output High (Logic "1")	90% VDD (min)
Output Low (Logic "0")	10% VDD (max)
Symmetry	50% ±5%
Rise/Fall Time	6 nSec Max

### Tri-State Control

Supply Voltage	+2.5VDC	+3.3VDC
Output Active	1.75V min	2.0V min
Output in High Impedance State	0.5V max	0.5V max

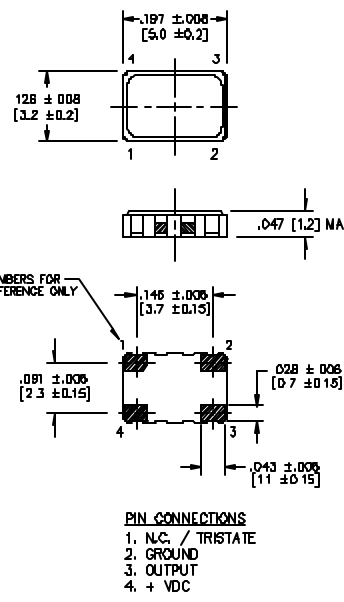
### \*Ordering Options:

Operating Temperature	Frequency Stability	Supply Voltage	Operating Frequency (MHz)
C	E	C	xxMxxxx
D	F	D	xxMxxxx

T105B C E C 10M0000

### Product Selection Code (refer to the above example):

This part is RoHs compliant, -20 to +70C, ±2.5 ppm, 2.5 volt CMOS output at 10.000MHz operating frequency.



\* Some combinations may not be available. Please consult factory