

# 5.0 mm x 3.2 mm XO

# C105B series

### Description:

The C105B Crystal Oscillator (XO) Series products provide a wide range of options in temperature stability, operating frequency range, and multiple supply voltages in a 5.0 x 3.2mm ceramic package.



### Features:

- Available in frequencies from 1.544 MHz to 156MHz
- Tri-state Enable/Disable
- Hermetically sealed ceramic SMD package
- TTL/HCMOS compatible
- RoHS-6/Leadfree compliant
- Can withstand Solder Reflow temperatures of 260°C.

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

Frequency	Operating Temperature	Product Code	Freq. Stability	Product Code
1.544 to 156MHz	-10 to +60C	<b>A</b>	+/- 25 ppm	<b>A</b>
	0 to +70C	<b>B</b>	+/- 50 ppm	<b>B</b>
	-20 to 70C	<b>C</b>	+/- 75 ppm	<b>C</b>
	-40 to 85C	<b>D</b>	+/-100ppm	<b>D</b>

- \*\*\*Frequency stability includes 25C tolerance, drift over temperature, change versus voltage and load, 20 year aging, shock and vibration

### Aging: (typical at 156MHz after 30 days continuous operation)

Frequency	Timeframe	Aging	Product Code
156 MHz	1st Year	+/- 5.0ppm	<b>N/A</b>

### Supply Voltage (Vs):

Power Supply (Vs)	1.8 Vdc +/-10%	2.5 Vdc +/-10%	3.3 Vdc +/-10%	5.0 Vdc +/-10%
<b>Product Code</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>

### Current Consumption ( I<sub>DD</sub> ):

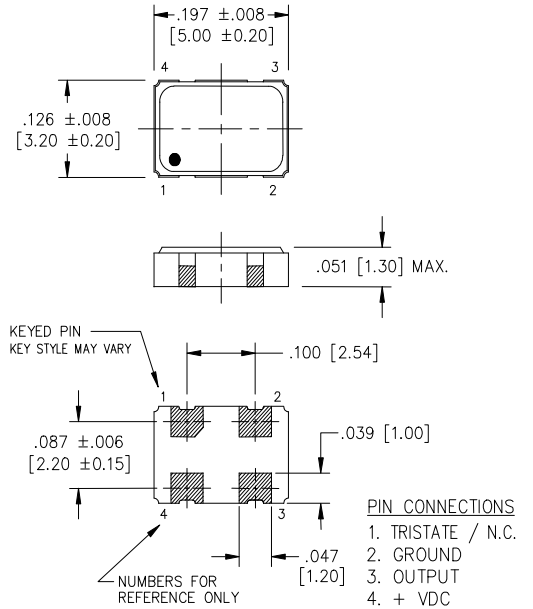
Frequency Range ( MHz )	I <sub>DD</sub> ( at 1.8 V )	I <sub>DD</sub> ( at 2.5V )	I <sub>DD</sub> ( at 3.3V )	I <sub>DD</sub> ( at 5.0V )
	mA	mA	mA	mA
1.544 to 9.999	6	7	8	10
10.000 to 34.999	7	8	10	25
35.000 to 49.999	15	20	25	35
50.000 to 125.000	25	30	35	60
125.000 to 156.000	25	30	40	80

### Environmental:

Storage Temperature	-55 to +125 °C
---------------------	----------------

### Output Waveform:

		Min	Typical	Max
Output Symmetry	At 50% V <sub>DD</sub>	45%	50%	55%
Rise Time ( nS )	Tr	3	5	10
Fall Time ( nS )	Tf	3	5	10
Output Voltage	V <sub>OH</sub>	90% V <sub>DD</sub>		
Output Voltage	V <sub>OL</sub>			10% V <sub>DD</sub>
HCMOS load ( pF )		29.70	30.00	30.30



**Start-up Time: 10 mS max.**

### Tri-state function Pin 1:

Pin 1 = logic high or open ; Output active at Pin 3

Pin 1 = logic low ; high impedance at pin 3 Output disabled

### Ordering Options:

Product Family	Operating Temperature	Frequency Stability	Supply Voltage	Operating Frequency
C105B	A	A	A	XXX.XXXX MHz
C105B	B	B	B	XXX.XXXX MHz
C105B	C	C	C	XXX.XXXX MHz
C105B	D	D	D	XXX.XXXX MHz

**C105B C A B 10.0000MHz**  
**Part Number Build Example**

**\*\*Consult Bliley sales if other options required**

**\*\* Not all combinations of operating frequency and supply voltage are available.**

**RoHs compliant; -20 to 70C; +/- 25 ppm with a 2.5 volt supply**  
**And 10 MHz nominal operating frequency.**