

3.2 mm x 2.5 mm XO

C106A series

Description:

The C106A Crystal Oscillator (XO) Series products provide a wide range of options in temperature stability, operating frequency range, and multiple supply voltages in a 3.2 x 2.5 mm ceramic package.



Features:

- Available in frequencies from 1.0 MHz to 200MHz.
- Tri-state Enable/Disable
- Hermetically sealed ceramic SMD package
- TTL/HCMOS compatible
- RoHS-6/Leadfree compliant

Frequency Range, Operating Temperature, and Frequency Stability:

Frequency	Operating Temperature	Product Code	Freq. Stability	Product Code
1.000 to 200MHz	-10 to +60C	A	+/- 25 ppm	A
	0 to +70C	B	+/- 50 ppm	B
	-20 to 70C	C	+/- 75 ppm	C
	-40 to 85C	D	+/-100ppm	D

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

Aging: (typical at 20MHz after 30 days continuous operation)

Frequency	Timeframe	Aging	Product Code
20 MHz	1st Year	+/- 5.0ppm	N/A

Supply Voltage (Vs):

Power Supply (Vs)	1.8 Vdc +/-10%	2.5 Vdc +/-10%	3.3 Vdc +/-10%
Product Code	A	B	C

Supply Voltage Sensitivity (+/- 10%) : +/- 2 ppm max. frequency change

Current Consumption (I_{DD}):

	I _{DD} (at 1.8 V)	I _{DD} (at 2.5V)	I _{DD} (at 3.3V)
Frequency Range (MHz)	mA	mA	mA
1.000 to 9.999	6	8	10
10.000 to 34.999	8	10	15
35.000 to 49.999	15	20	25
50.000 to 79.999	25	30	35
80.000 to 133.000	25	30	35
133.000 to 166.000	N/A	30	35
166.000 to 200.000	N/A	N/A	35

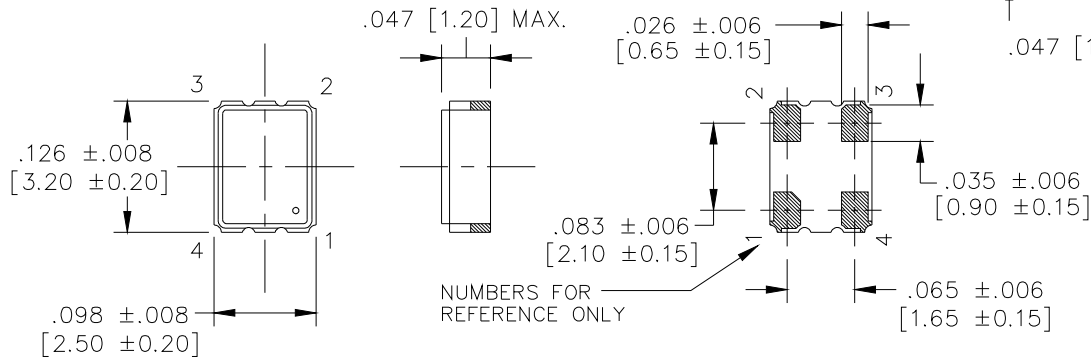
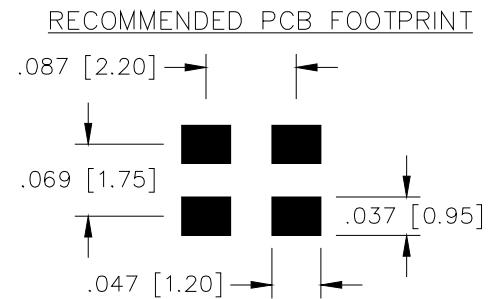
**N/A means that frequency range not available for particular supply voltage.

Environmental:

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

		Min	Typical	Max
Output Symmetry	At 50% V _{DD}	45%	50%	55%
Rise Time (nS)	Tr	3	5	10
Fall Time (nS)	Tf	3	5	10
Output Voltage	V _{OH}	90% V _{DD}		
Output Voltage	V _{OL}			10% V _{DD}
HCMOS load (pF)		14.85	15.00	15.15



PIN CONNECTIONS

1. TRISTATE
2. GROUND
3. OUTPUT
4. + VDC

Start-up Time: 5 mS max.

Tri-state function Pin 1:

Pin 1 = logic high (0.7*V_{supply}) or open ; Output active at Pin 3

Pin 1 = logic low (0.3*V_{supply}) ; high impedance at pin 3 Output disabled

Ordering Options:

Product Family	Operating Temperature	Frequency Stability	Supply Voltage	Operating Frequency
C106A	A	A	A	XXX.XXXX MHz
C106A	B	B	B	XXX.XXXX MHz
C106A	C	C	C	XXX.XXXX MHz
C106A	D	D		XXX.XXXX MHz

C106A 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.

How to Order This Product:

Contact Bliley Technologies with Product Selection Code from Ordering Options Section above.