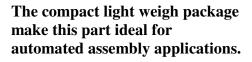


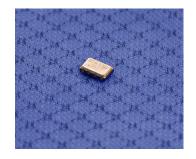
# 3.2 x 2.5 mm TCVCXO

## **T106A Series**

## **Description:**

The T106A Temperature Compensated Voltage Controllable Crystal Oscillator (TCVCXO) offers a wide range of performance options in miniature 3.2 x 2.5 mm ceramic SMD package.





### **Features:**

- Available in frequencies from 15 to 40 MHz. with 16.368MHz, 16.369MHz, 19.2 MHz, 20MHz, 26MHz, and 40 MHz standards. Contact the factory for other standard frequencies.
- +/-5ppm pull range available
- Clipped Sine Wave output
- Standard 3.2 x 2.5 mm ceramic SMD package
- External VCC bypass capacitor required.
- RoHS-6 Lead-free compliant

Frequency Range, Operating Temperature, and Frequency Stability:

_	i v
Ī	Frequency
	Range
	15MHz to 40MHz

Operating Temperature		
Operating	Product	
Temperature	Code	
-20 to +70° C	С	
-40 to +85° C	D	
0 to +55° C	E	
-10 to +60° C	F	
-30 to +85° C	G	

	J
Frequency	Product
Stability	Code
+/- 0.5 ppm	Α
+/- 1.0 ppm	В
+/- 1.5 ppm	С
+/- 2.0 ppm	D
+/- 2.5 ppm	E

Freq stability "A" is not available for temperature range "D" and only on a case by case basis for temperature range "G". Frequency stability "B" is available for temperature range "G" on a case by case basis only. Please consult factory for these options.

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

0 0		
Frequency	Timeframe	Aging
10 MHz	1st Year	+/- 1.0 ppm

#### **Phase Noise:**

Frequency	Offset	Phase Noise (Typ.)
	1 Hz	- 60 dBc/Hz
	10 Hz	- 85 dBc/Hz
19.2 MHz	100 Hz	-115 dBc/Hz
19.2 1/172	1 KHz	-135 dBc/Hz
	10 KHz	-148 dBc/Hz
	100 KHz	-150 dBc/Hz

**Supply Voltage (Vs):** 

	+2.5 Vdc	+3.3 Vdc
Power Supply (Vs)	+/-10%	+/-10%
Product Code	С	D

www.bliley.com 2545 West Grandview Blvd Erie, PA. 16506
Page 1 of 2



# 3.2 x 2.5 mm TCVCXO T106A Series

**Current Consumption:** 

Freq Range	15MHz ≤ 26MHz	26MHz – 40MHz
Supply Current	2.0mA	2.5 mA

**Output Waveform:** 

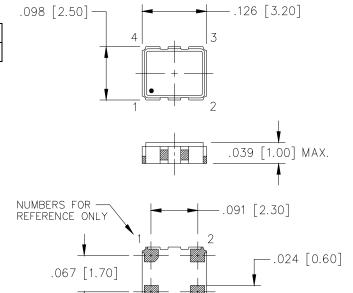
Clipped Sine Wave		
Product Code	N/A	
Output Level	0.8 V p-p min.	
Load	10K // 10 pF	

**Pulling Range:** 

Tuning	None(TCXO)	+/-5 ppm
Range		
Product	T	A
Code	(Pin 1 – Ground)	

## **Environmental:**

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



## PIN CONNECTIONS

1. TCVCXO: VOLTAGE CONTROL

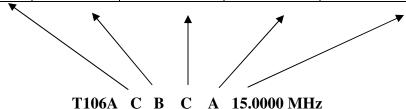
-.028 [0.70]

TCXO: GROUND

- 2. GROUND
- 3. OUTPUT
- 4. + VDC

**Ordering Options:** 

Operating	Frequency	Supply	Pulling	<b>Operating Frequency (MHz)</b>
Temperature	Stability	Voltage	Range	
C	A	C	T	xxMxxxx
D	В	D	A	xxMxxxx
Е	C			xxMxxxx
F	D			xxMxxxx
G	Е			xxMxxxx



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

This part is RoHs compliant, -20 to +70C, +/- 1.0pm, 2.5 volt clipped sine wave with +/- 5 ppm pull at 15MHz output frequency.

## \*\* Not all combinations available in this product

2545 West Grandview Blvd Erie, PA. 16506 Page 2 of 2