



FEATURES

- ✓ High Stability vs. Temperature
- ✓ Quick Warm-Up Time
- ✓ Low Age Rates
- ✓ Low Phase Noise
- ✓ 36x27mm Package

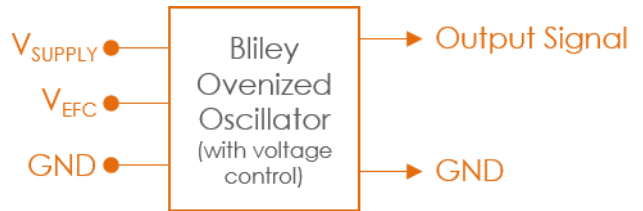
Oven Controlled Oscillator

#blileytakesyoufurther

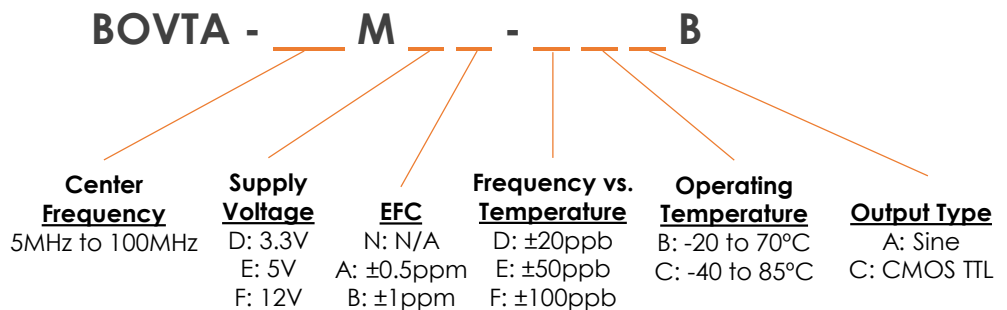
Description

Bliley high performance OXCO product offering is a result of 85 years in the Frequency Control Industry. Modern layout topologies enable Bliley to engineer and produce robust designs for all applications.

Block Diagram



Part Number Configuration



*Not all combinations of options may be possible
 **Other options may be available

Performance Specifications

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Frequency Range		5		100	MHz
Initial Tolerance	@ +25°C±1°C			±0.25	ppm
Warm Up Time	To initial tolerance			3	Min
Frequency Stability					
vs. Temperature	See Options (Max) Referenced to +25°C		±20, ±50, ±100		ppb
vs. Load	± 5% Δ in Load		±2		ppb
vs. Supply Voltage	± 5% Δ in supply		±2		ppb
ADEV (Short Term Stability)	T = 1 second		5E-12		
Aging					
After 30 Days Operation					
Per Day				±1.0	ppb
1 st Year				±100	ppb
Supply Voltage (Vdd)	Option D	3.13	3.3	3.47	Vdc
	Option E	4.75	5	5.25	Vdc
	Option F	11.4	12	12.6	Vdc
Power Dissipation					
Start Up	@ +25°C			7	W
Steady State	@ +25°C		2.0		W
Electronic Frequency Control					
Voltage Range		0		Vdd	Vdc
Center Voltage			Vdd/2		Vdc
Frequency Range	See Options (Min)	±0.5, ±1			ppm
Slope			positive		
Input Impedance			100		kΩ
Linearity			10		%

Note: Values typical of 10MHz units

DISCLAIMER: Bliley Technologies, Inc. reserves the right to make changes to the product(s) and/or information contained herein without notice. No liability is assumed as a result of their use or application. No intellectual property rights accompany the sale or delivery of any such product(s) or information.

Performance Specifications

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Output Characteristics (CMOS/TTL)		MIN	TYP	MAX	
High Output Level	Logic "1"	90% Vdd			Vdc
Low Output Level	Logic "0"	10% Vdd			Vdc
Rise/Fall Time		10			nSec
Duty Cycle		45	50	55	%
Load		15			pF
Output Characteristics (Sinusoid)		MIN	TYP	MAX	
Output Level		7.0			dBm
VSWR	Into 50 Ω	1.5:1			
Harmonics		-30			dBc
Load		45	50	55	Ω

Parameter	Conditions	Values		Unit
		TYP	TYP	
Phase Noise		TYP	TYP	
Phase Noise (10 MHz)	Tested at +25°C	Sinusoid	CMOS	
	1Hz	-90	-90	dBc/Hz
	10Hz	-120	-120	dBc/Hz
	100Hz	-140	-140	dBc/Hz
	1kHz	-145	-145	dBc/Hz
	10kHz	-150	-150	dBc/Hz
	100kHz	-155	-155	dBc/Hz

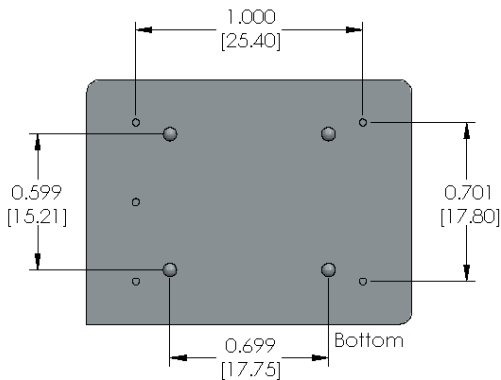
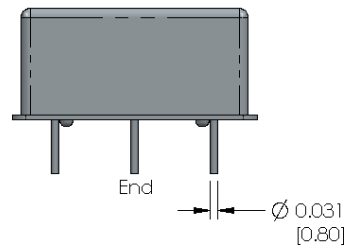
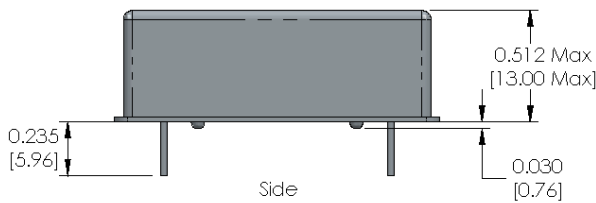
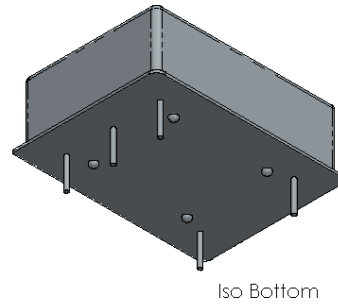
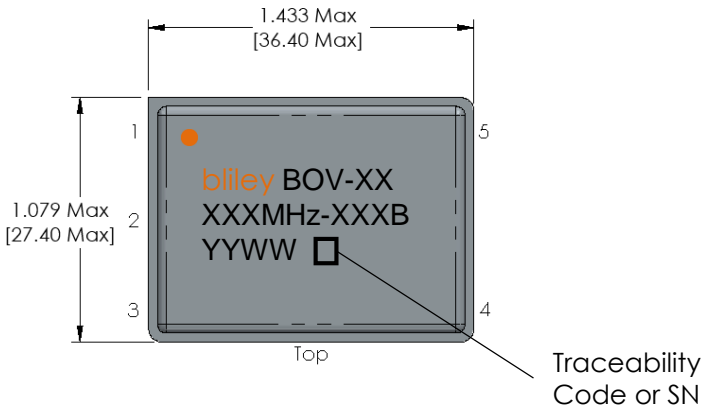
Note: Values typical of 10MHz units

DISCLAIMER: Bliley Technologies, Inc. reserves the right to make changes to the product(s) and/or information contained herein without notice. No liability is assumed as a result of their use or application. No intellectual property rights accompany the sale or delivery of any such product(s) or information.

Environmental Compliance

Parameter	Conditions	Values			Unit
		MIN	TYP	MAX	
Operating Temperature	Option B	-20		+70	°C
	Option C	-40		+85	°C
Storage Temperature		-55		+100	°C
Seal	MIL-STD-202 Method 112 Test Condition D				
Mechanical Shock	MIL-STD-202 Method 213 Test Condition J				
Vibration	MIL-STD-202 Method 201				

Physical Specifications



PIN	FUNCTION
1	EFC/N.C.
2	N.C
3	Supply Voltage
4	RF Output
5	Ground

Tolerances (mm) .X = ± 0.5, .XX = ±0.2 unless otherwise specified



Notes:
• None

DISCLAIMER: Bliley Technologies, Inc. reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No intellectual property rights accompany the sale or delivery of any such product(s) or information.