



FEATURES

- ✓ Surface Mountable Design
- ✓ High Stability vs. Temperature
- ✓ Quick Warm-Up Time
- ✓ Low Age Rates
- ✓ Low Phase Noise
- ✓ 22x25mm Package

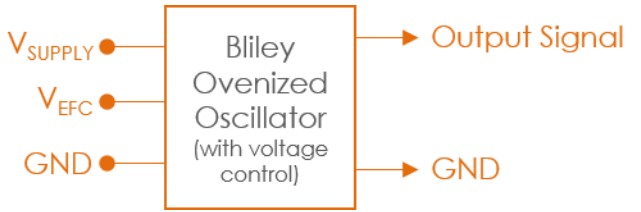
#blileytakesyoufurther

Oven Controlled Oscillator

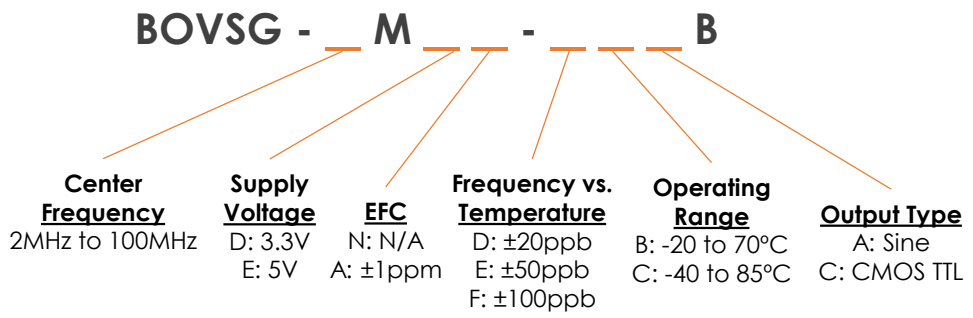
Description

Bliley high performance OCXO 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		2		100	MHz
Initial Tolerance	@ +25°C±1°C			±100	ppb
Warm Up Time	To initial tolerance			3	Min
Frequency Stability					
vs. Temperature	See Options (Max)		±20, ±50, ±100		ppb
vs. Load	5% Change		±2		ppb
vs. Supply Voltage	5% Change		±2		ppb
Short-Term Stability	T = 1 Second		5E-12		
Aging					
After 30 Days Operation					
Per Day				±0.5	ppb
1 st Year				±80	ppb
Supply Voltage	Option D	3.13	3.3	3.47	Vdc
	Option E	4.75	5	5.25	Vdc
Oscillator Power	Start Up			3	W
	Steady State			1.5	W
Electronic Frequency Control					
Voltage Range		0		Vdd	Vdc
Center Voltage			Vdd/2		Vdc
Frequency Range		±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		5			nSec
Duty Cycle		45	50	55	%
Load		15			pF
Output Characteristics (Sinusoid)		MIN	TYP	MAX	
Output Level		9.0			dBm
Spurious		-70			dBc
Harmonics		-40			dBc
Load		45	50	55	Ω

Parameter	Conditions	Values		Unit
		MIN	MAX	
Phase Noise		MIN	MAX	
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

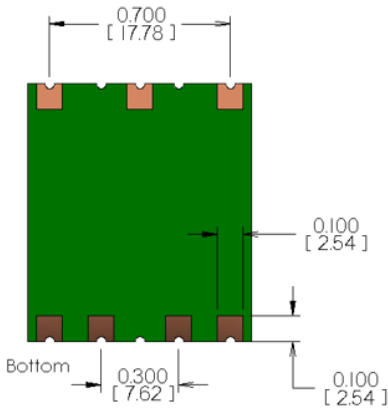
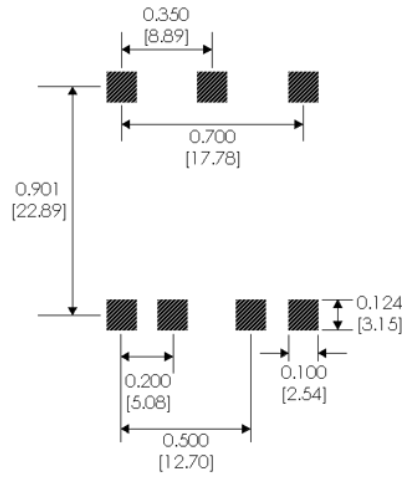
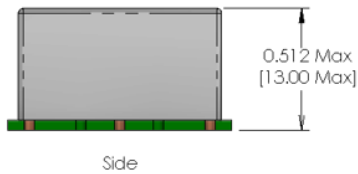
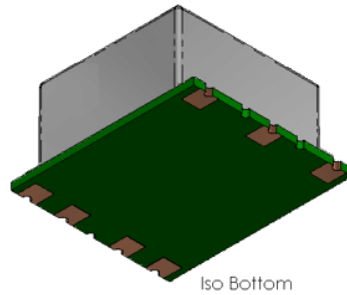
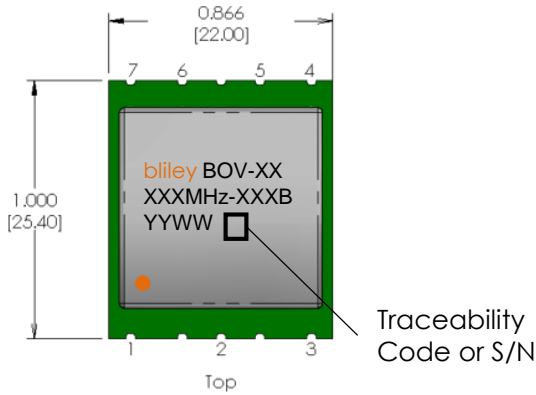
Note: Values typical of 10MHz units

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		-50		+100	°C
Seal	MIL-STD-202 Method 112 Test Condition D				
Mechanical Shock	MIL-STD-202, Method 213, Test Condition A				
Vibration	MIL-STD-202, Method 204, Test Condition C				

Physical Specifications



Recommended Landing Pattern

PIN	FUNCTION
1	EFC/N.C.
2, 5, 6	N.C.
3	Supply Voltage
4	RF Output
7	Ground

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

Notes:
 • Non-RoHS available upon request