

**BLILEY TECHNOLOGIES INC.**2545 West Grandview Blvd.
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This is a preliminary Specification. An exact Part number and Finalized Specification will be created at the point of order.

BLILEY P/N: NV47Axxxx

Type: SC Cut Crystal OCXO with Electrical Frequency Adjust

Frequency: 10.0 MHz

Output: (Standard)

- a. Type Sinewave
- b. Level +7 dBm Min \pm 1 dB (Standard)
(Over -20°C to +70°C and $V_s = +5.0 \pm 3\%$)
(+10 dBm & +13 dBm – Optional)
- c. Load 50 Ohms
- d. Harmonics/Subs -30 dBc Max
- e. Spurious -80 dBc Max

Output: (Optional)

- a. Type TTL or HCMOS
- b. Levels “0” < 0.1(V_s)
“1” > 0.9(V_s)
- c. Load 100k Ohm // 15 pF
- d. Rise / Fall Time <6 ns (10% to 90%)
- e. Duty Cycle 50% \pm 5% @ 50% level

Frequency Stability:

- a. Temperature (Standard) \pm 10 ppb max over 0°C to +50°C
- (Optional) \pm 5 ppb max over 0°C to +50°C (Stratum 3E)
- (Optional) \pm 50 ppb max over -20°C to +70°C
- (Optional) \pm 20 ppb max over -20°C to +70°C

NOTE: Additional Temperature Ranges and Stability options are available – Please consult the factory about your exact needs.

- b. Aging \pm 1.0 ppb/day max
 \pm 0.3 ppm/year max
- c. Supply \pm 1.0 ppb max for a 1% change

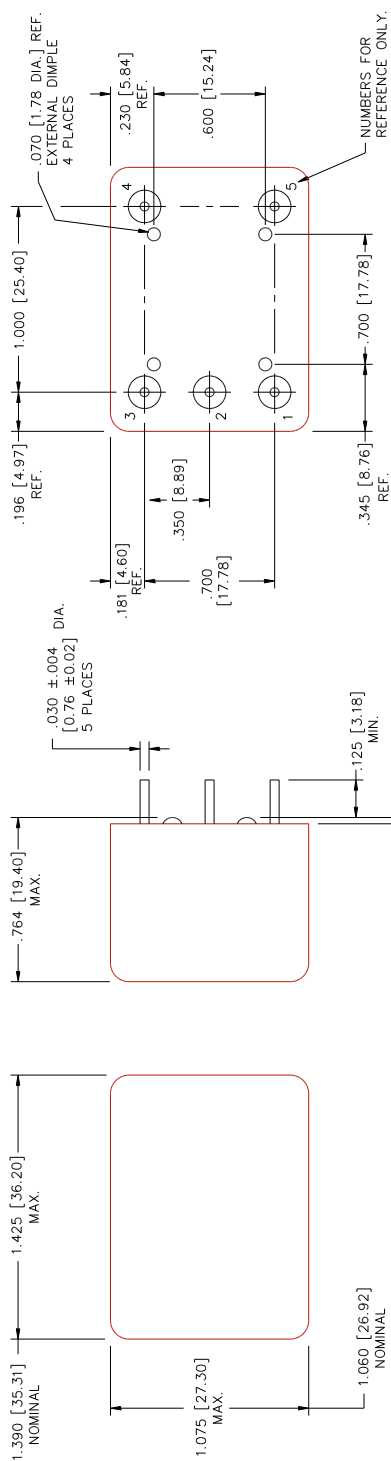
Release Date: **12-2-04**

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Electrical Frequency Adjust:	
a. Range	± 0.5 ppm Min to ± 1.5 ppm Max
b. Sensitivity	2.5 Hz/V Min to 7.5 Hz/V Max
c. Voltage	+0.0 Vdc to +4.0 Vdc
d. Slope	Positive
e. Input Impedance	10 Kohms to 100 Kohms
Start-Up:	10 MHz output level within 0.5 seconds over -20°C to +70°C
Short Term Stability:	$\leq 1 \times 10^{-10}$ for 0.1 sec to 1 sec
Phase Noise:	<u>Typical</u>
(Consult Factory for Improved Phase Noise)	-115 dBc/Hz at 10 Hz -145 dBc/Hz at 100 Hz -155 dBc/Hz at 1 KHz -160 dBc/Hz at 10 KHz -160 dBc/Hz at 100 KHz
Warm-Up:	Within ± 0.03 ppm in 5 Minutes
(Ref. to 30 Minutes on time)	Within ± 0.01 ppm in 15 Minutes
Supply:	+5.0 Vdc $\pm 5\%$ 5 Watts Max at Warm-Up 2 Watts Max Steady state at +25°C
Vref:	+4.0 Vdc ± 0.2 Vdc at 1 mA Max
Operating Temperature Range:	
a. Standard	0°C to +50°C
b. Optional	-20°C to +70°C
<i>NOTE: Extended Temperature ranges are available – Please consult the factory about your exact needs.</i>	
Storage Temperature Range:	-55°C to +85°C
Package:	Standard CO-08 – Euro Package, See Outline Drawing

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LET.	DESCRIPTION	DATE	BY	CKD.
A	REVISED TO STD. PRODUCT	4-25 2003		



PIN CONNECTIONS

1. VOLTAGE CONTROL
2. V REF.
3. +VDC
4. R.F. OUTPUT
5. R.F. & CASE GROUND

BLILEY TECHNOLOGIES, INC.
2545 WEST GRANDVIEW BLVD.
ERIE, PENNSYLVANIA 16506



ATTENTION
Static Sensitive
Devices
Handle only at
Static Safe Work
Stations

MATERIAL		SHOP TYPE		OUTLINE DRAWING				REVLET	
				NV47A					
		SUPERSEDES		SIZE		FSCM NO.		DRAWING NO.	
		811495		B		71034		811715	
		DR		CCL				A	
		JPG		AP					
		AP							
		SCALE:		2:1		DATE DRAWN		1-22-2002	
FINISH:									

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