OUTPUT

Frequency

10 MHz

Level

+4 dBm ±3 dB into 50 ohms

EXTERNAL REFERENCE INPUT

Frequency

5 or 10 MHz, ±3 Hz selectable

Level

+4 dBm ±3dB into 50 ohms

VSWR

1.5:1 max

Phase Noise L(f), typical at 10 MHz

1 Hz	-85 dBc
10 Hz	-117 dBc
100 Hz	-132 dBc
1 KHz	-142 dBc
10 KHz	-147 dBc

OUTPUT STABILITY

Aging

1×10^{-9} /day after 24 hours operating preceeded by 3 days of operation.
Disciplined.

Phase Noise L(f)

1 Hz	-100 dBc
10 Hz	-130 dBc
100 Hz	-155 dBc
1 KHz	-163 dBc

Temperature Stability

$\pm 5 \times 10^{-9}$, 0° to +65°C total change

Type 2, 3rd order PLL

BW @ 0.05 Hz, nominal

Input Output PLL Rejection

1 Hz	15 dB Min.
10 Hz	35 dB Min
100 Hz	55 dB Min

MECHANICAL

Dimensions

2.26” x 2.26” x 0.61” max

Connectors

SMA Output, SMA Input
S4B-PH-K-S-(LF)(SN) Control/Status
S6B-PH-K-S-(LF)(SN) Programming

Packaging

Nickel plated aluminum housing

POWER REQUIREMENTS

Warm-Up Power

7.5 Watts for 5 minutes

Total Power

3.5 Watts at +25°C

Supply Voltage

+12 VDC +-5%

CRYSTAL

Type

10 MHz SC-cut, ≥90°C

STATUS

Pin – Locked status

TTL, High = locked
TTL, Low = Not locked

OTHER

Test Data

Output Level, Phase Noise free-running and with external input.
Smooth transition verification.

Slow Transition

Smooth frequency transitions on the loss and acquisition of reference input

Disciplined

Begins initial aging correction after being locked for 14 days

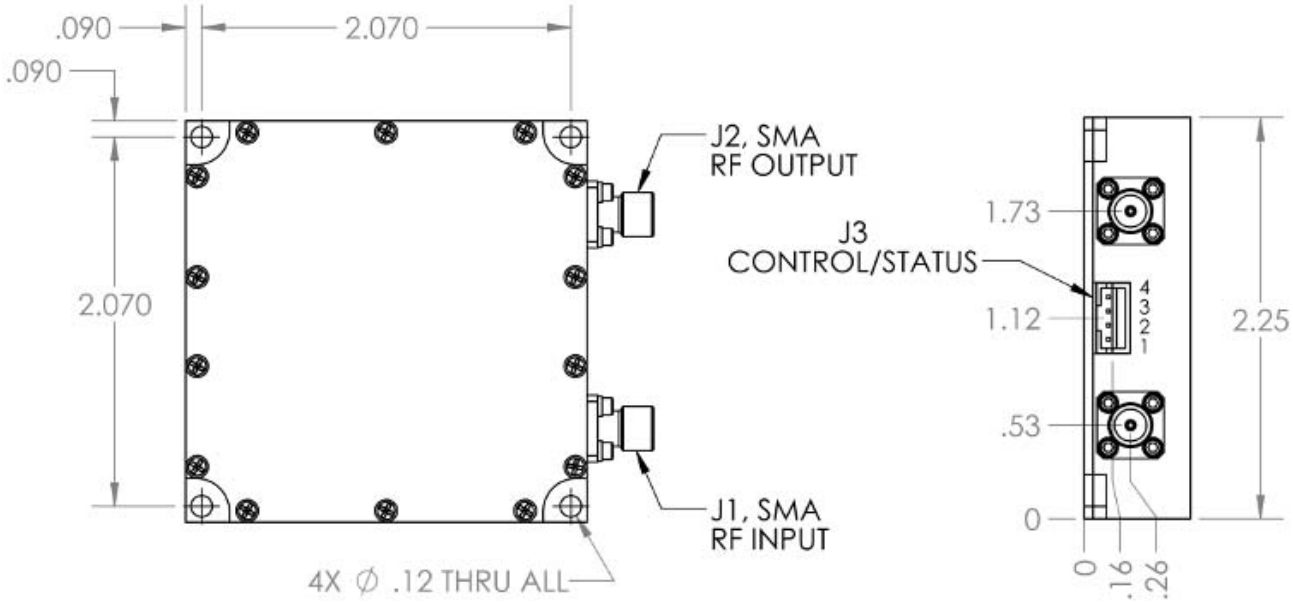
REV	DATE	REVISION RECORD	DWN	AUTH
-	06-08-16	Initial Release	BH	LR

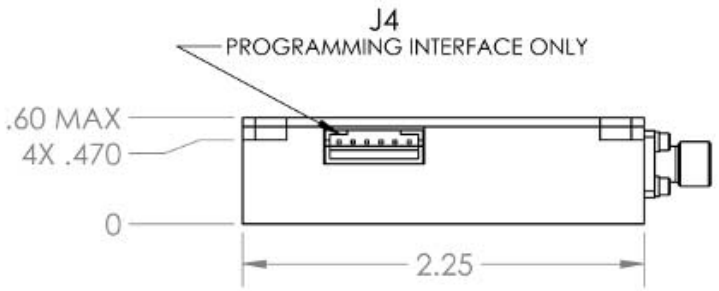
Wenzel Associates, Inc.
Austin, Texas

Title:
10 MHz-SC Digital Phase Locked Oscillator with Smooth Frequency Transitions (RoHS)

P/N:	Rev:	Date:	Drawn:	Ref:
501-30110	**-**	**06-08-16**		**500-25237e**

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec:	0.XXX Dec:	FSCM:	Page 1 of 2
	±0.030”	±0.010”	62821	





Connection	Function
J1	RF INPUT
J2	RF OUTPUT
J3-1	GROUND
J3-2	N/C
J3-3	STATUS
J3-4	SUPPLY VOLTAGE
J4	PROGRAM N/A

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