INPUT

Frequency, Level

10 MHz, LVDS, differential

OUTPUTS (2)

Frequency, Level

10 MHz, +4 dBm ±3 dB into 50 ohms

STABILITY

Aging

5×10^{-10} /day after 24 hours operating, preceeded by 3 days operation

5×10^{-8} /year typical

Phase Noise L(f), Static

1 Hz	-105 dBc/Hz
10 Hz	-135 dBc/Hz
100 Hz	-155 dBc/Hz
1 KHz	-163 dBc/Hz
10 KHz	-165 dBc/Hz

G-Sensitivity

Tested at .01 g^2/Hz, 10 to 100 Hz

Measured data at 12 Hz in 3 axes

Temperature Stability, (Ref +25°C)

$\pm 2 \times 10^{-8}$, -40° to +75°C

$\pm 5 \times 10^{-9}$, -10° to +65°C

Sub-Harmonics (5 MHz)

-45 dBc minimum

Input/Output PLL Rejection

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

MECHANICAL

Dimensions

4.0" x 4.75" x 1.7" maximum

4-40 threaded inserts, 6 places

Connectors

J3, J4 Type-N Male Output

J2, J1 MIL-DTL-38999 Input and Power

Internal:

S4B-PH-K-S-(LF)(SN)

S6B-PH-K-S-(LF)(SN) Programming

Packaging

Machined Aluminum Housing

POWER REQUIREMENTS

Warm-Up Power, typical

9 Watts for 5 minutes

Total Power, typical

5 Watts at +25°C

Supply Voltage

+28 VDC +-5%, +32 Volts max

CRYSTAL

Type -XX

10 MHz SC-cut, select crystals (≥90°C)

-01 3e-10/g per axis typical

-02 2e-10/g per axis guaranteed

-03 1e-10/g per axis guaranteed

-04 Vibration Isolated, ~50Hz system

ENVIRONMENT

Relative Humidity

Up to 95% at +30°C

Conformally coat PCBs

Atmospheric Pressure

Operating to 13,500 feet

Non-Op to 50,000 feet

Shock, Vibration

Designed to meet specifications after two half-sine pulses in two directions for each axis, 20ms duration (12 shocks total), 5g each axis

OTHER

Frequency Calibration

Calibration enable: TTL Low (0V)

Calibration not enabled:

TTL High (5V)

Slow-Transition

Smooth frequency transition on the loss of lock and reacquisition of input reference

Disciplined

Will learn reference frequency with Cal pin.

Begins aging correction after locked for 14 days

REV	DATE	REVISION RECORD	DWN	AUTH
-	03-07-16	Initial Release	Liz	BH
A	06-04-16	housing, connectors, supply, output, shock	Liz	BH
B	06-20-16	Supply	Liz	BY

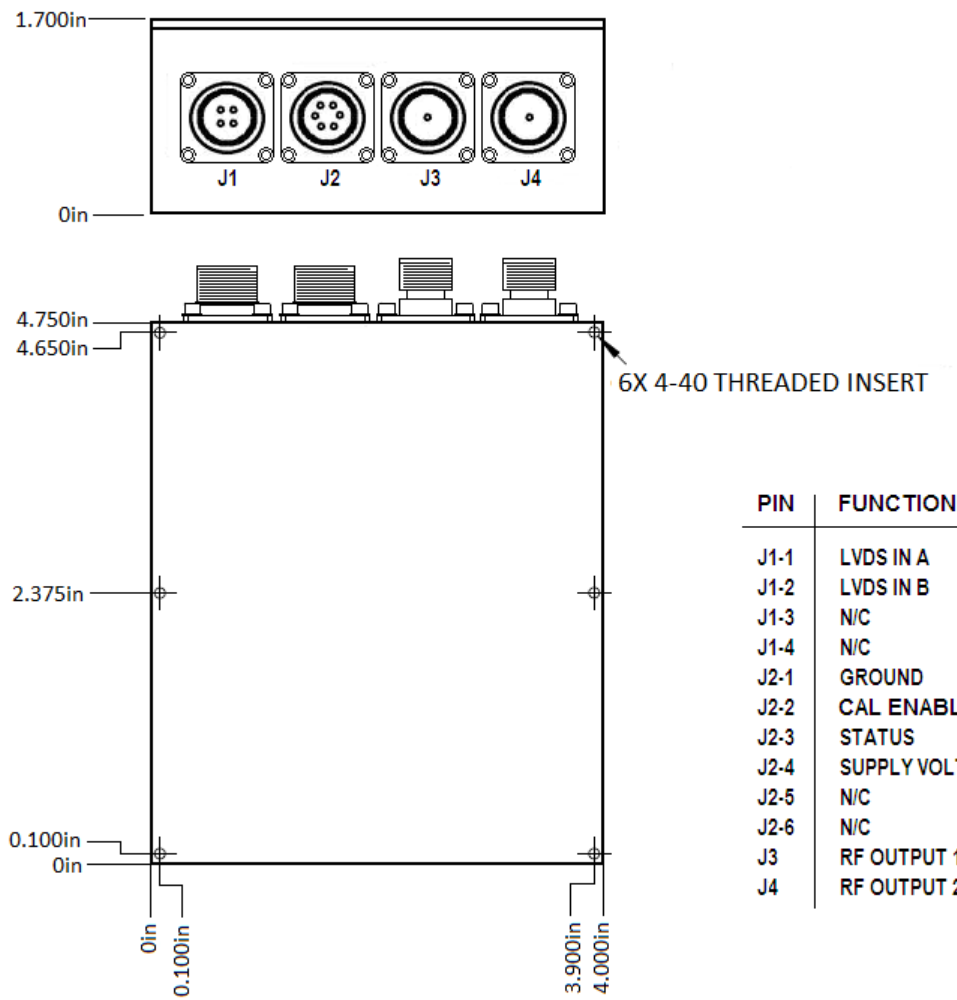
Wenzel Associates, Inc.

Austin, Texas

Title: **10 MHz-SC Slow Transition, Low-G PLO**

P/N:	Rev:	Date:	Drawn:	Ref:
501-30019-XX	**B**	**06-20-16**		26975

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



PIN	FUNCTION
J1-1	LVDS IN A
J1-2	LVDS IN B
J1-3	N/C
J1-4	N/C
J2-1	GROUND
J2-2	CAL ENABLE
J2-3	STATUS
J2-4	SUPPLY VOLTAGE
J2-5	N/C
J2-6	N/C
J3	RF OUTPUT 1
J4	RF OUTPUT 2

PRELIMINARY MECHANICAL OUTLINE

Wenzel Associates, Inc.
Austin, Texas

Title: **10 MHz-SC Slow Transition, Low-G PLO**

P/N:	Rev:	Date:	Drawn:	Ref:
501-30019-XX	B	06-20-16		26975

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