

REV	DATE	REVISION RECORD	DWN	AUTH
-	03-03-11	Initial Release	PAC	

OUTPUT

Frequency

100 MHz, (Two individual OCXOs),
each set to -2 ppm of nominal

Level

+13 dBm ±2 dB into 50 ohms, each output

STABILITY

Aging

1 x 10⁻⁶ first year
after 30 days operating, typical
5 x 10⁻⁷ second year, typical
3 x 10⁻⁷ per year thereafter, typical

Phase Noise L(f), Static

	Max	Goal
1 Hz	-71 dBc/Hz	-75 dBc/Hz
10 Hz	-101 dBc/Hz	-105 dBc/Hz
100 Hz	-132 dBc/Hz	-135 dBc/Hz
1 kHz	-158 dBc/Hz	-161 dBc/Hz
10 kHz	-174 dBc/Hz	-177 dBc/Hz
100 kHz	-174 dBc/Hz	-178 dBc/Hz

Temperature Stability

±2 x 10⁻⁷, 0° to +50 °C (Ref +25 °C)

Harmonics

-30 dBc, max

Non-Harmonic Spurious

-90 dBc, max

Frequency Accuracy

-2 ppm, ±1 x 10⁻⁸, of nominal frequency,
at time of shipment

MECHANICAL

Dimensions

2.386 x 2 x 1.06", goal

Connectors

SMA(f) and solder pins on one side

Packaging

Nickel-plated machined aluminum housing

Mounting

Threaded inserts, # 2-56, 4 places

POWER REQUIREMENTS

Warm-Up Power

10 Watts for 5 minutes at +25 °C

Total Power

5 Watts at +25 °C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning

For Frequency Accuracy
adjustment only

Electrical Tuning

-7 to +3 x 10⁻⁶ min, ±5 VDC
-2 ppm @ 0 VDC
Negative slope

Modulation Bandwidth

1 kHz min

CRYSTAL

Type

100 MHz SC-cut (2)

OTHER

Design

PCB's secured for operation
in a dynamic environment

Oven Monitor (TTL)

Low, oven not ready
High, oven ready

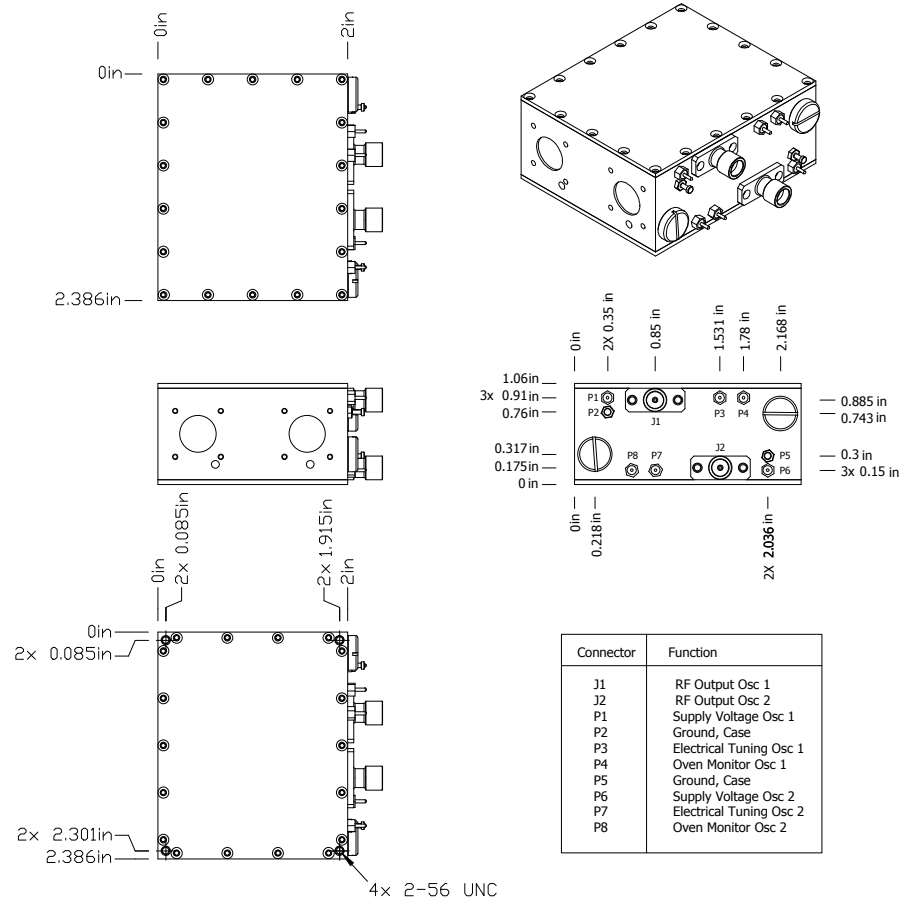
ENVIRONMENTAL


Storage Temperature

-40° to +85 °C

Acceleration Sensitivity

7 x 10⁻¹⁰/g worst axis





Wenzel Associates, Inc.
Austin, Texas

Title: **100 MHz-SC Dual Ultra Low Noise Crystal Osc.**

P/N: 501-23701	Rev: -	Date: 03-03-11	Drawn:	Ref: 500-17444c
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1