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
1×10^{-6} first year
after 30 days operating, typical
5×10^{-7} second year, typical
3×10^{-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
$\pm 2 \times 10^{-7}$, 0° to +50°C (Ref +25°C)

Harmonics
-30 dBc, max

Non-Harmonic Spurious
-90 dBc, max

Frequency Accuracy
-2 ppm, $\pm 1 \times 10^{-8}$, 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 $\times 10^{-6}$ 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

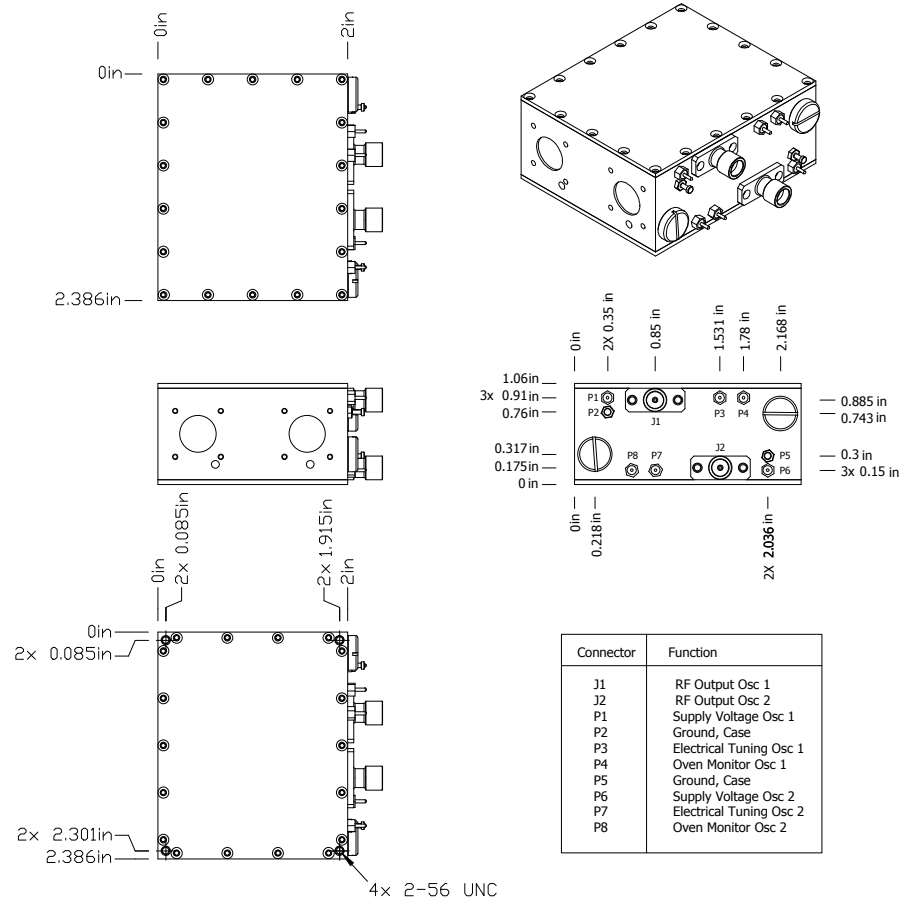**Oven Monitor** (TTL)
Low, oven not ready
High, oven ready

ENVIRONMENTAL

Storage Temperature
-40° to +85°C

Acceleration Sensitivity
7×10^{-10}/g worst axis

Connector	Function
J1	RF Output Osc 1
J2	RF Output Osc 2
P1	Supply Voltage Osc 1
P2	Ground, Case
P3	Electrical Tuning Osc 1
P4	Oven Monitor Osc 1
P5	Ground, Case
P6	Supply Voltage Osc 2
P7	Electrical Tuning Osc 2
P8	Oven Monitor Osc 2

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