

EXTERNAL REFERENCE INPUT**Input Frequency**

10 MHz

Input Level

+7 dBm ±6 dB into 50 ohms

OUTPUT**Output Frequency**

50 MHz

Output Level

A: +13 dBm ±2 dB (± 3 dB *) into 50 ohms

B: +10 dBm ±2 dB (± 3 dB *) into 50 ohms,
each output**STABILITY, free running****Aging (typical)** 1×10^{-6} per year after 30 days operating 5×10^{-7} per year, second year 3×10^{-7} per year, thereafter**Phase Noise L(f)**

	Standard	Premium
10 Hz	-93 dBc/Hz	-99 dBc/Hz
100 Hz	-128 dBc/Hz	-134 dBc/Hz
1 kHz	-155 dBc/Hz	-162 dBc/Hz
10 kHz	-165 dBc/Hz	-167 dBc/Hz
100 kHz	-167 dBc/Hz	-170 dBc/Hz

Temperature StabilityE: $\pm 2 \times 10^{-7}$, 0° to +50°C (Ref +25°C)F: $\pm 5 \times 10^{-7}$, -20 to +70°C (Ref +25°C)G*: $\pm 2 \times 10^{-6}$, -55° to +85°C (Ref +25°C)**SPECTRAL PURITY****Harmonics**

-30 dBc

PLL Divider Products

-50 dBc

Non-Harmonic Spurious

-70 dBc

MECHANICAL**Packaging**

Nickel-Plated Machined Aluminum Case

A: Single Output

B: Dual output

Dimensions

2.5" x 3.5" x 0.8"

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed-Thru Solder Pins

GND: Ground Turret

POWER REQUIREMENTS**Supply Voltage**

+15 VDC ±5% or +12 VDC ±5%

Warm-Up Power

≤ 8 Watts for 5 minutes at +25°C

Total Power

≤ 5 Watts at +25°C

ADJUSTMENT**Loop BW**

Target Bandwidth: ≤ 60 Hz

Type 2 Loop

CRYSTAL**Type**

50 MHz SC-cut

Acceleration Sensitivity

5e-10 per g, per axis typical

PHASE LOCK STATUS**Phase Lock Alarm (ALM)**

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

Phase Voltage Monitor (ΦV)

Electrical tuning monitor pin provided

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-21-13	Initial Release	CB	PAC

Ordering Options

-xx	Voltage	Phase Noise L(f)	Package	Temp (Ref +25 °C)
01	+15V	Standard	A	E
02	+15V	Standard	A	F
03	+15V	Standard	A	G
05	+15V	Standard	B	E
06	+15V	Standard	B	F
07	+15V	Standard	B	G
11	+15V	Premium	A	E
12	+15V	Premium	A	F
13	+15V	Premium	A	G
15	+15V	Premium	B	E
16	+15V	Premium	B	F
17	+15V	Premium	B	G
21	+12V	Standard	A	E
22	+12V	Standard	A	F
23	+12V	Standard	A	G
25	+12V	Standard	B	E
26	+12V	Standard	B	F
27	+12V	Standard	B	G
31	+12V	Premium	A	E
32	+12V	Premium	A	F
33	+12V	Premium	A	G
35	+12V	Premium	B	E
36	+12V	Premium	B	F
37	+12V	Premium	B	G

Wenzel Associates, Inc.

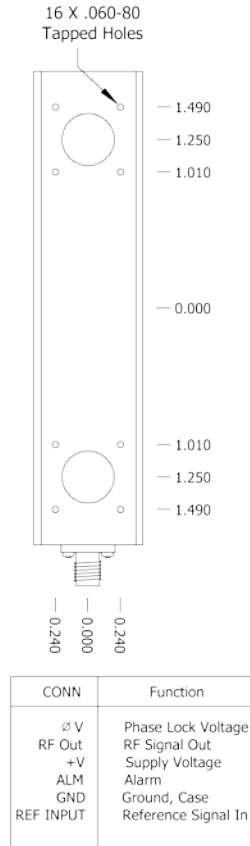
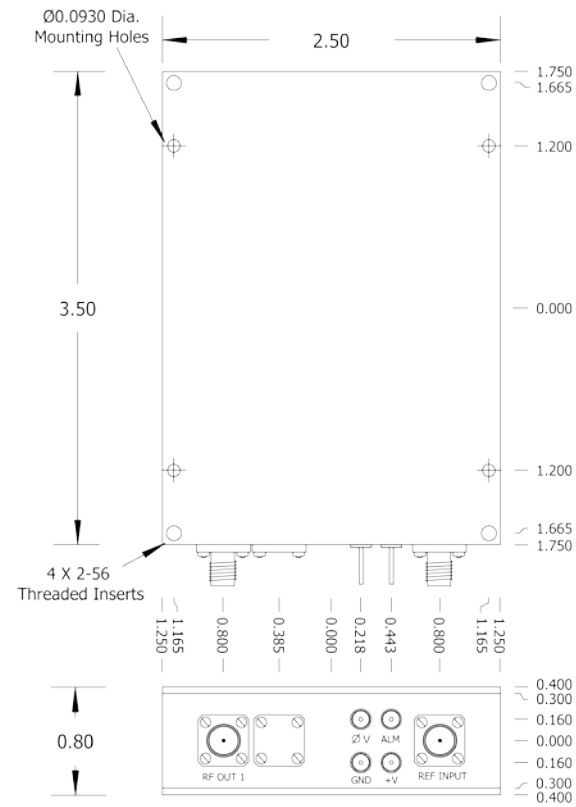
Austin, Texas

Title:

**50 MHz-SC Phase Lock Crystal Oscillator V1
(LBW=60 Hz)**

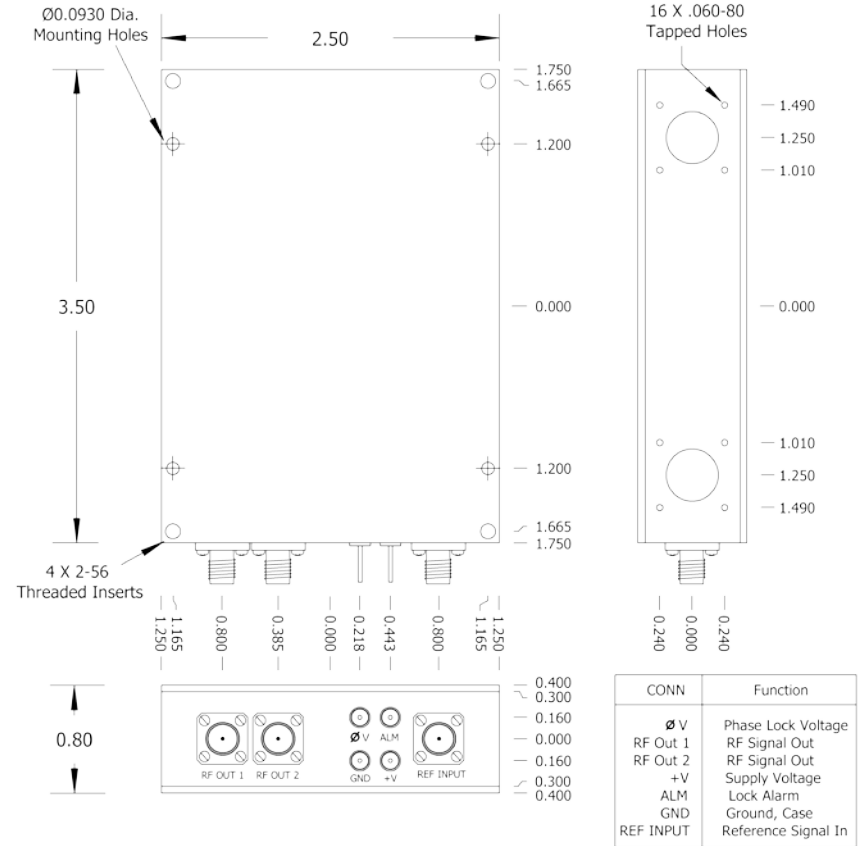
P/N: 501-27588-xx	Rev: -	Date: 11-21-13	Drawn:	Ref: C/P
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 2

Package A



CONN	Function
Ø V	Phase Lock Voltage
RF Out	RF Signal Out
+V	Supply Voltage
ALM	Alarm
GND	Ground, Case
REF INPUT	Reference Signal In

Package B



CONN	Function
Ø V	Phase Lock Voltage
RF Out 1	RF Signal Out
RF Out 2	RF Signal Out
+V	Supply Voltage
ALM	Lock Alarm
GND	Ground, Case
REF INPUT	Reference Signal In

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