

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 x 10⁻⁶ per year after 30 days operating
 5 x 10⁻⁷ per year, second year
 3 x 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 Stability

E: ± 2 x 10⁻⁷, 0° to +50°C (Ref +25°C)
 F: ± 5 x 10⁻⁷, -20 to +70°C (Ref +25°C)
 G*: ± 2 x 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: ≤ 5 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
-	03-19-14	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

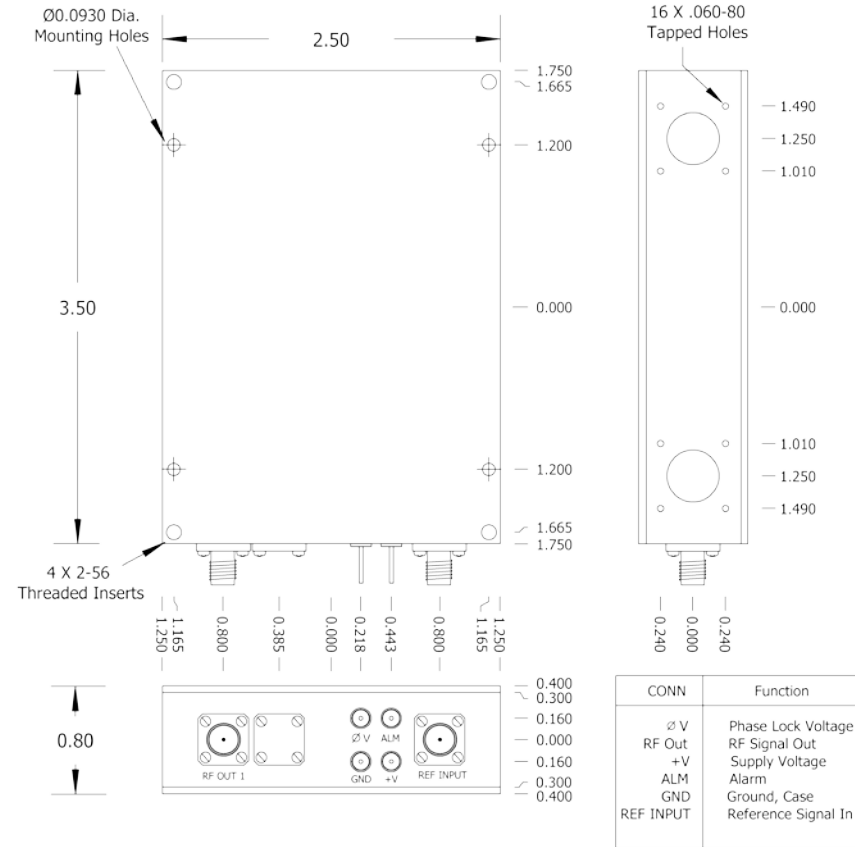
Title:

**50 MHz-SC Phase Lock Crystal Oscillator V1
(LBW=5 Hz)**

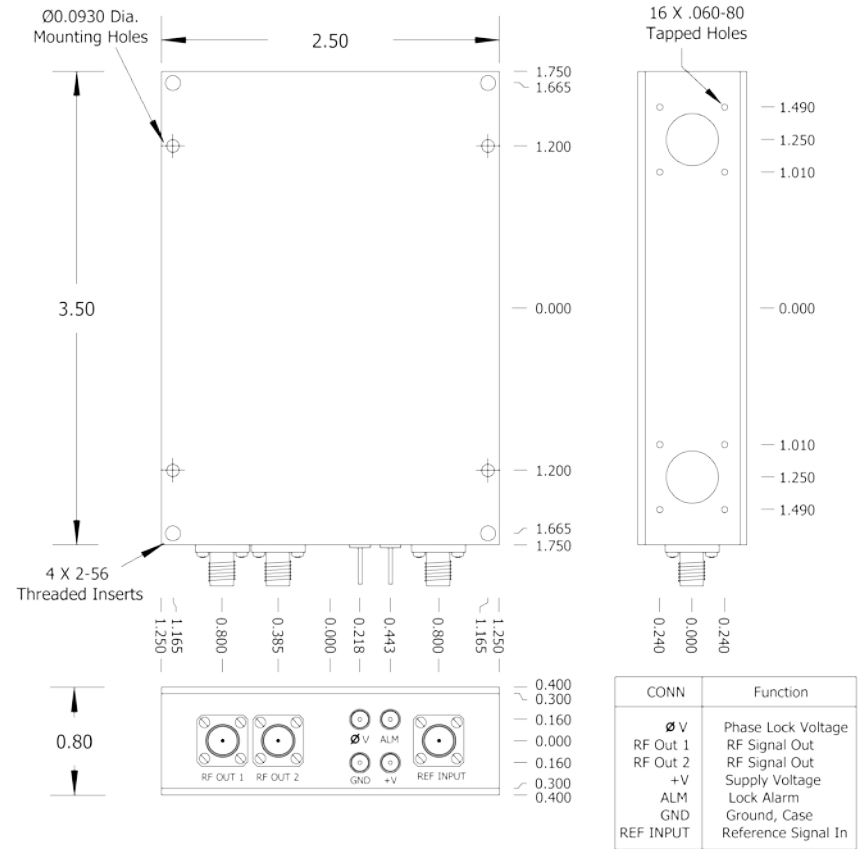
P/N: 501-27507-xx	Rev: -	Date: 03-19-14	Drawn:	Ref: C/P
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 2
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Package A



Package B



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(LBW=5 Hz)**

P/N:

501-27507-xx

Rev:

-

Date:

03-19-14

Drawn:

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Tolerances:
(except as noted)
Dimensions are in inches

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 ± 0.030 "

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FSCM:
62821

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