

EXTERNAL REFERENCE INPUT**Frequency**

10 MHz

Level

+7 dBm ±6 dB into 50 ohms

OUTPUT**Frequency**

10 MHz

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**5 x 10⁻¹⁰ /day after 24 hours operating5 x 10⁻⁸ /year, second year, typical3 x 10⁻⁸ per year, thereafter**Phase Noise L(f) Free Running**

	Standard	Premium
10 Hz	-135 dBc/Hz	-140 dBc/Hz
100 Hz	-157 dBc/Hz	-160 dBc/Hz
1 kHz	-169 dBc/Hz	-172 dBc/Hz
10 kHz	-172 dBc/Hz	-174 dBc/Hz

Temperature StabilityE: ±1 x 10⁻⁸, 0° to +50°C (Ref +25°C)F: ±2 x 10⁻⁸, -20° to +70°C (Ref +25°C)G*: ±1 x 10⁻⁷, -55° to +85°C (Ref +25°C)**SPECTRAL PURITY****Harmonics**

≤ -30 dBc

PLL Divider Products

≤ -50 dBc

Non-Harmonic Spurious

≤ -80 dBc, excluding power supply line related spurs

MECHANICAL**Packaging**

Nickel-Plated Machined Aluminum Case

Dimensions

2.5" x 3.5" x 0.8"

A: Single Output

B: Dual output

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru

Terminals

GND: Ground Turret

POWER REQUIREMENTS**Supply Voltage**

+15 VDC ±5% or +12 VDC ±5%

Warm-Up Power

≤ 6 Watts for 5 minutes at +25°C

G* ≤ 8 Watts for 5 minutes at +25°C

Total Power

≤ 4 Watts at +25°C

G* ≤ 6 Watts at +25°C

ADJUSTMENT**Loop BW**

Type 2 Loop

Target Bandwidth: 1 Hz

CRYSTAL**Type**

10 MHz SC-cut

Acceleration Sensitivity

1e-10/g per axis, guaranteed

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
A	08-11-16	Phase Noise, Temperature stability, Loop BW	BH	VG
B	02-14-19	Total Power	BH	VG

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:

10 MHz-SC Phase Lock Crystal Oscillator V2 (LBW=1Hz)

P/N:

501-27601-xx

Rev:

B

Date:

02-14-19

Drawn:

Ref:

ULN

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

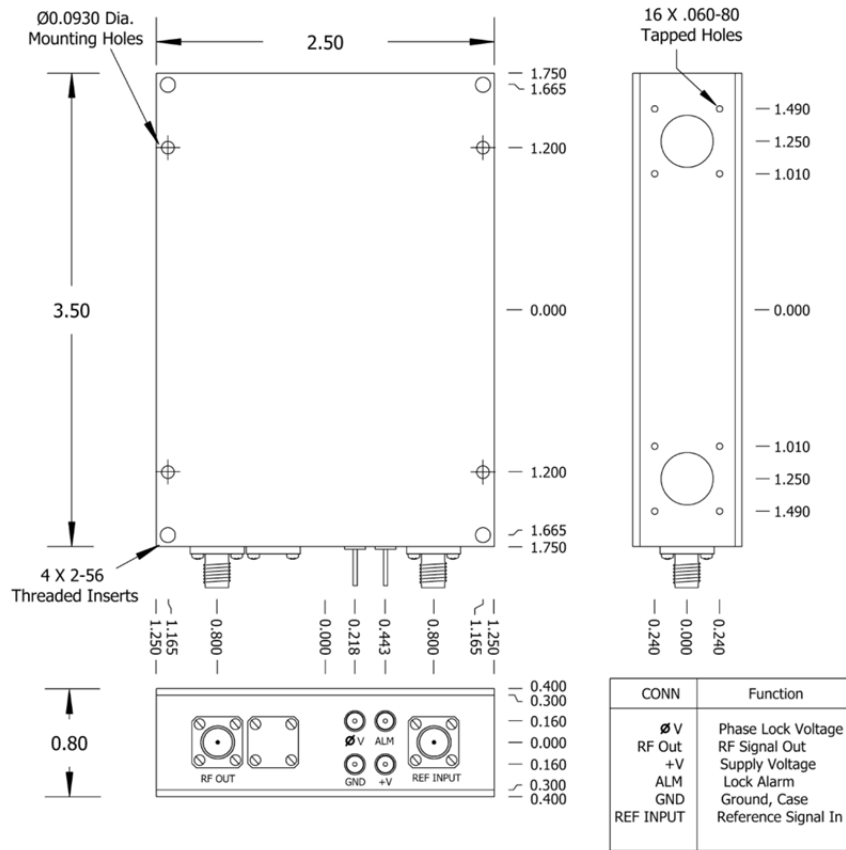
±0.010"

FSCM:

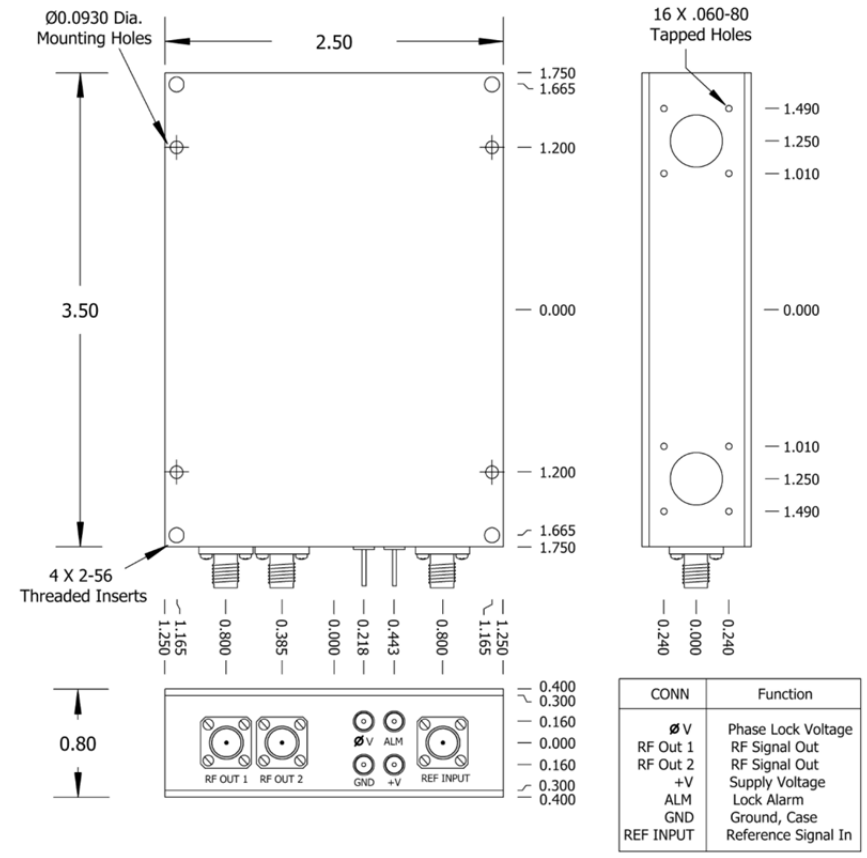
62821

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Package A



Package B



Wenzel Associates, Inc.

Austin, Texas

Title: **10 MHz-SC Phase Lock Crystal Oscillator V2 (LBW=1Hz)**

P/N: **501-27601-xx** Rev: **B** Date: **02-14-19** Drawn: Ref: **ULN**

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