

**OUTPUT****Frequency**

50 MHz

**Level**

+13 dBm ±2dB into 50 ohms

**STABILITY****Aging (typical)**1 x 10<sup>-6</sup> per year after 30 days operating5 x 10<sup>-7</sup> second year3 x 10<sup>-7</sup> per year, thereafter**Phase Noise L (f)**

|         | Standard    | Premium     |
|---------|-------------|-------------|
| 100 Hz  | -134 dBc/Hz | -140 dBc/Hz |
| 1 kHz   | -164 dBc/Hz | -169 dBc/Hz |
| 10 kHz  | -174 dBc/Hz | -177 dBc/Hz |
| 100 kHz | -175 dBc/Hz | -178 dBc/Hz |

**Temperature Stability**E: ±2 x 10<sup>-7</sup>, 0° to +50°C (Ref +25°C)F: ±5 x 10<sup>-7</sup>, -20 to +70°C (Ref +25°C)**Harmonics**

≤ -30 dBc

**Spurious**

≤ -80 dBc, excluding power supply line related spurs

**MECHANICAL****Dimensions**

1.75 x 2.94 x 1"

**Connectors**

SMA(f) and solder pins on side

**Packaging**

Solder sealed steel can

**POWER REQUIREMENTS****Warm-Up Power**

≤ 5 Watts for 5 minutes at +25°C

**Total Power**

≤ 2.5 Watts at +25°C

**Supply Voltage**

+15 VDC ±5% or +12 VDC ±5%

**ADJUSTMENT**

(consult factory for non standard tuning options)

**Mechanical Tuning**±4 x 10<sup>-6</sup>**Electrical Tuning**±2 x 10<sup>-7</sup>, ±5 VDC, Negative slope**CRYSTAL****Type**

50 MHz SC-cut

| REV | DATE    | REVISION RECORD | DWN | AUTH |
|-----|---------|-----------------|-----|------|
| -   | 12-2-13 | Draft           | 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                 |
| 11  | +15V    | Premium          | A       | E                 |
| 12  | +15V    | Premium          | A       | F                 |
| 21  | +12V    | Standard         | A       | E                 |
| 22  | +12V    | Standard         | A       | F                 |
| 31  | +12V    | Premium          | A       | E                 |
| 32  | +12V    | Premium          | A       | F                 |

**Wenzel Associates, Inc.**

Austin, Texas

Title:

**50 MHz-SC Ultra Low Noise Crystal Oscillator**

P/N:

**501-27522-xx**

Rev:

-

Date:

**12-2-13**

Drawn:

Ref:

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

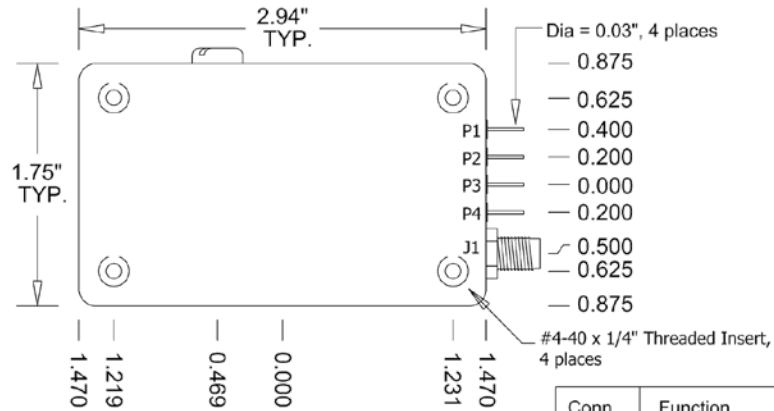
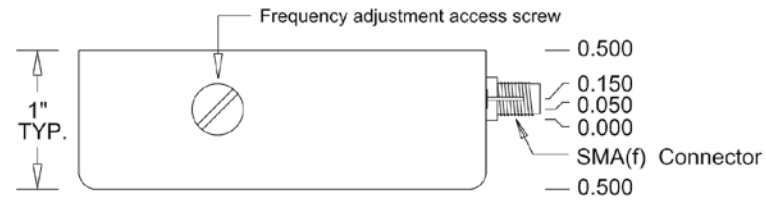
±0.010"

FSCM:

62821

Page 1 of 2

### Package A



Connector numbers are for reference only, they do not appear on unit.

| Conn | Function          |
|------|-------------------|
| J1   | RF Output         |
| P1   | N/C               |
| P2   | Electrical Tuning |
| P3   | Supply Voltage    |
| P4   | Case Ground       |

## Wenzel Associates, Inc.

Austin, Texas

Title:

**50 MHz-SC Ultra Low Noise Crystal Oscillator**

P/N:

**501-27522-xx**

Rev:

-

Date:

**12-2-13**

Drawn:

Ref:

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

**±0.030"**

0.XXX Dec:

**±0.010"**

FSCM:

**62821**

Page 2 of 2