

REV	DATE	REVISION RECORD	DWN	AUTH
-	10-08-13	Draft	BH	Liz
B	10-16-13	Updated noise, temp,watts	Liz	Liz

## OUTPUT

### Frequency

50 MHz

### Level

+10 ±2 dBm into 50 ohms

## STABILITY

### Aging

±1 x 10<sup>-6</sup> per year

after 30 days operating, typical

### Phase Noise L(f), typical, Static

**100 MHz -01 -02 -03 -04**

10 Hz -90 -95 -99 -104 dBc/Hz\*

100 Hz -120 -125 -130 -135 dBc/Hz

1 kHz -145 -150 -155 -156 dBc/Hz

10 kHz -165 -168 -170 -170 dBc/Hz

100 kHz -165 -168 -170 -170 dBc/Hz

\*typical at 10 Hz

### Temperature Stability

≤ ±2 x 10<sup>-7</sup>, 0° to +50°C (Ref +25°C)

≤ ±5 x 10<sup>-7</sup>, -20° to +70°C (Ref +25°C)

≤ ±1.1 x 10<sup>-6</sup>, -40° to +85°C (Ref +25°C)

## Harmonics

≤ -30 dBc

## Spurious

≤ -80 dBc

## MECHANICAL

### Dimensions

<1.03" x 1.03" x 0.515"

### Connectors

Solder pins on base, glass stand-offs

### Packaging

Solder sealed steel can

## POWER REQUIREMENTS

### Warm-Up Power

< 3.3 W for 2.5 min

### Total Power

1.3 W at +25°C steady state, typical

### Supply Voltage

+12 VDC, ±1 VDC

## ADJUSTMENT

### Electrical Tuning

±7 x 10<sup>-6</sup> nominal, 0 - 10 VDC,

Positive slope

## CRYSTAL

### Type

100 MHz SC-cut w/ divide by 2

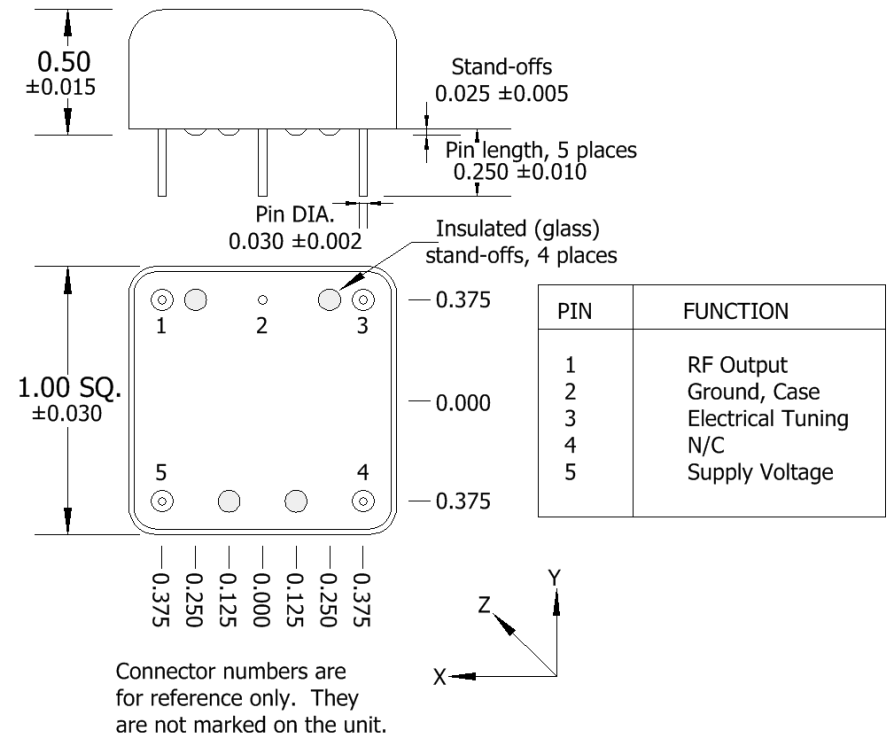
## TEST DATA

Output Level at +25°C

Static Phase Noise

Temperature Stability

Power – Warm-up / Total at +25°C



Connector numbers are for reference only. They are not marked on the unit.



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**50 MHz-SC HS-ONYX IV Crystal Oscillator**

P/N:

**501-27228-xx**

Rev:

**B**

Date:

**10-16-13**

Drawn:

Ref:

**501-24760-xx**

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

**±0.030"**

0.XXX Dec:

**±0.010"**

FSCM:

**62821**

Page 1 of 1