

OUTPUT

Frequency

100 MHz

Level

+10 \pm 2 dBm into 50 ohms

STABILITY

Aging

$\pm 1 \times 10^{-6}$ 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 -172 dBc/Hz

100 kHz -165 -168 -172 -172 dBc/Hz

*typical at 10 Hz

Temperature Stability

$\leq \pm 2 \times 10^{-7}$, 0° to +50°C (Ref +25°C)

$\leq \pm 5 \times 10^{-7}$, -20° to +70°C (Ref +25°C)

$\leq \pm 1.1 \times 10^{-6}$, -40° to +85°C (Ref +25°C)

Harmonics

≤ -30 dBc

Spurious, tested, guaranteed

≤ -80 dBc, ≤ -100 dBc

MECHANICAL

Dimensions

$\leq 1.03'' \times 1.03'' \times 0.515''$

Connectors

Solder pins on base, glass stand-offs

Packaging

Solder sealed steel can

POWER REQUIREMENTS

Warm-Up Power

≤ 3 W for 2.5 min

Total Power

≤ 1.1 W at +25°C steady state, typical

Supply Voltage

+12 VDC \pm 1 VDC

ADJUSTMENT

Electrical Tuning

$\pm 4 \times 10^{-6}$ nominal, 0 - 5 VDC,

Positive slope

CRYSTAL

Type

SC-cut, 5e-10/g typical

TEST DATA

Output Level at +25°C

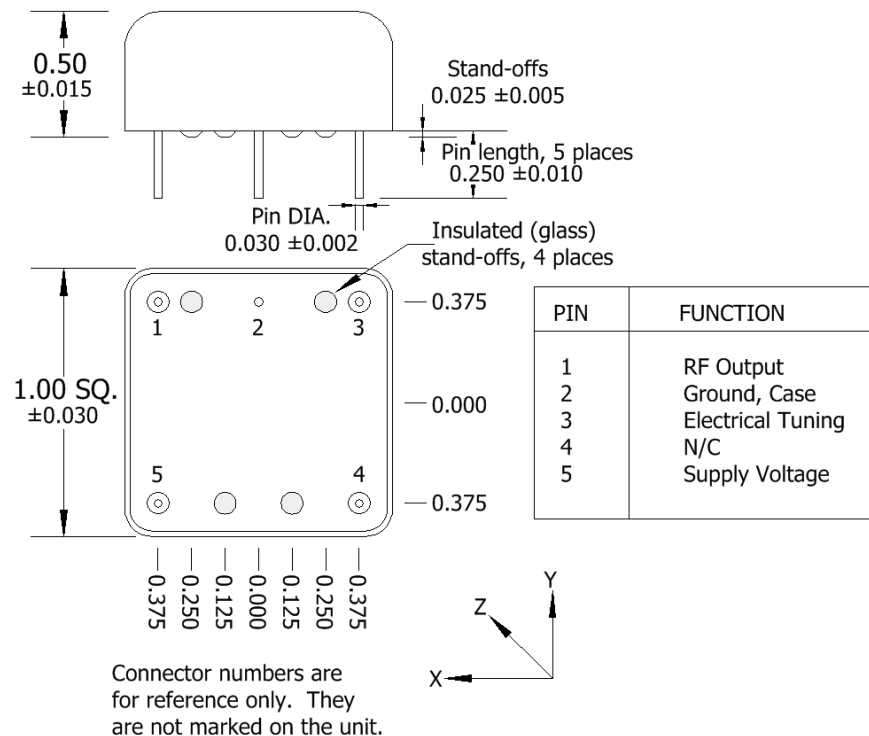
Static Phase Noise

Temperature Stability

Power – Warm-up

Total at +25°C

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-01-17	Draft	BH	BB



Wenzel Associates, Inc.

Austin, Texas

Title:

100 MHz-SC ONYX IV Crystal Oscillator

P/N:

501-31285-XX

Rev:

-

Date:

11-01-17

Drawn:

Ref:

24760

olerances:
(except as noted)
Dimensions are in inches

0.XX Dec:
 $\pm 0.030''$

0.XXX Dec:
 $\pm 0.010''$

FSCM:
62821

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