

REV	DATE	REVISION RECORD	DWN	AUTH
-	02-07-14	Draft	Liz	
A	10-26-17	Crystal Type	BH	GP

**OUTPUT**

**Frequency**

40 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	-76	-88	-92	-97	dBc/Hz*
100 Hz	-106	-118	-123	-128	dBc/Hz
1 kHz	-151	-161	-163	-165	dBc/Hz
10 kHz	-151	-161	-163	-165	dBc/Hz
100 kHz	-151	-161	-164	-165	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)  
 ≤ ±1.5 x 10<sup>-6</sup>, -40° to +85°C (Ref +25°C)

**Harmonics**

≤ -30 dBc

**Spurious, tested, guaranteed**

≤ -80 dBc, ≤ -100dBc

**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**

≤ 3W for 2.5 min

**Total Power**

≤ 1.2W 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

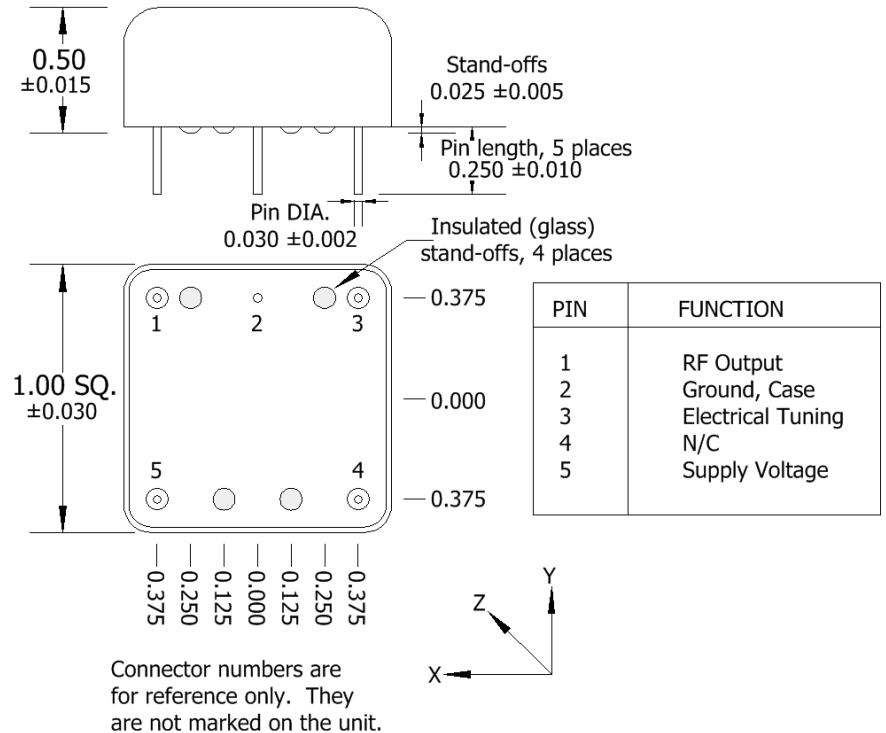
**CRYSTAL**

**Type**

40 MHz  
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



**Wenzel Associates, Inc.**  
Austin, Texas

Title: <b>40 MHz-SC ONYX IV Crystal Oscillator</b>				
P/N: <b>501-27830-XX</b>	Rev: <b>A</b>	Date: <b>10-26-17</b>	Drawn:	Ref: 24760
Tolerances: (except as noted) Dimensions are in inches		0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>