

OUTPUT

Frequency
10 MHz

Level
+10 dBm ±3 dB into 50 ohms

STABILITY**Aging**

±5 x 10⁻¹⁰ per day after 30 days
operating, typical

±5 x 10⁻⁸ per year after 180 days
operating, typical

Phase Noise L(f)

-01, -02, -03, -04

10 Hz -135 dBc/Hz

100 Hz -158 dBc/Hz

1 kHz -163 dBc/Hz

10 kHz -165 dBc/Hz

100 kHz -165 dBc/Hz

Temperature

±5 x 10⁻⁸, -20°C to +70°C (Ref +25°C)

±2 x 10⁻⁷, -40°C to +75°C (Ref +25°C)

MECHANICAL**Dimensions**

≤ 1.03" x 1.03" x 0.515"

Connectors

Solder pins on base

Packaging

Solder sealed steel can

POWER REQUIREMENTS**Warm-Up Power**

<4W for 3 min

Total Power

< 1.5W at +25°C steady state,
typical

Supply Voltage

+12 VDC, ±5%

ADJUSTMENT**Electrical Tuning**

±1 x 10⁻⁶, 0 - 10 VDC
Positive slope

CRYSTAL**Type**

10 MHz SC-cut

CRYSTAL**Type**

SC-cut, low-g:

-01 3e-10/g typical

-02 3e-10/g per axis, guaranteed

-03 2e-10/g per axis, guaranteed

-04 1e-10/g per axis, guaranteed

ENVIRONMENTAL**Temperature-Altitude**

40,000 feet at -40°C, operating

Storage

-54° to +85°C

Vibration, typical

10 to 1000 Hz, 0.06 g²/Hz

1000 Hz to 2000 Hz, -6dB/Octave

10 gs RMS

Shock

12 gs for 11 msec, three axes

Secure when mounting using

MIL-Grade epoxy

Humidity

95 to 100 percent relative humidity,
+28° to +85°C

TEST DATA

Output Level at +25°C

Static Phase Noise

Temperature Stability

Power – Warm-up and Total at +25°C

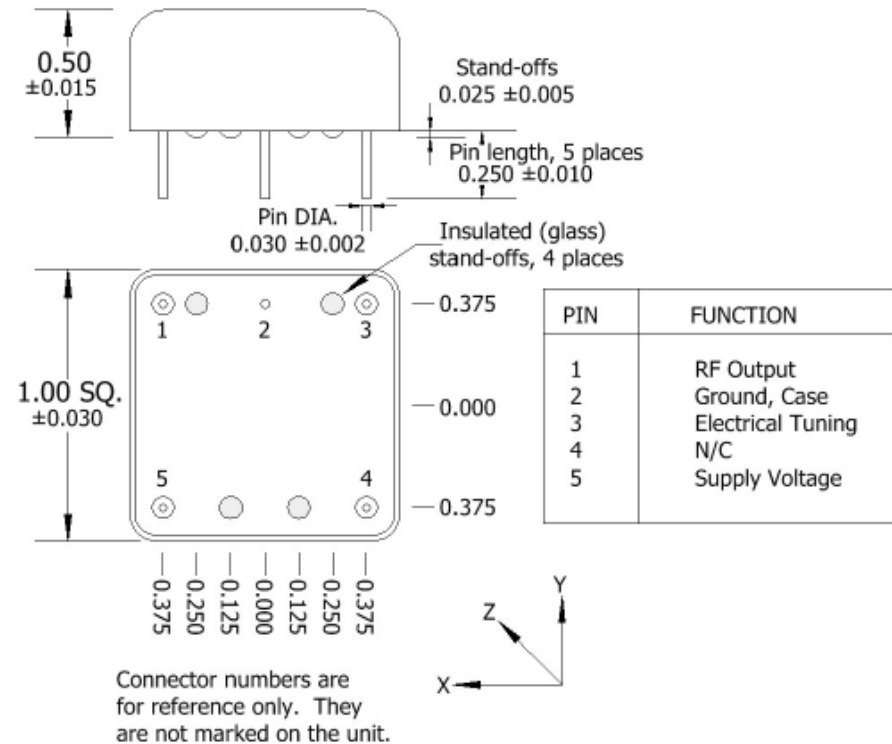
-01 Phase Noise under vibration at
0.06 g²/Hz at 100 Hz, one axis

-02 Phase Noise under vibration data,
0.06 g²/Hz at 100 Hz, three axes

-03 Phase Noise under vibration data,
0.06 g²/Hz at 100 Hz, three axes

-04 Phase Noise under vibration data,
0.06 g²/Hz at 100 Hz, three axes

REV	DATE	REVISION RECORD	DWN	AUTH
-	03-28-13	Draft	Liz	
A	08-28-13	Added -04	Liz	
B	09-18-23	Upper temperature range from +85 to +75	BH	



Quantic Wenzel
Wenzel Associates, Inc.

Title:
Premium Rugged 10 MHz-SC Onyx IV Crystal Oscillator

P/N: **501-26719-XX** Rev: **B** Date: **09-18-23** 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 1