

**OUTPUT****Frequency**

10 MHz

**Level**+10 dBm  $\pm$ 3 dB into 50 ohms**STABILITY****Aging** $\pm 5 \times 10^{-10}$  per day after 30 days operating, typical $\pm 5 \times 10^{-8}$  per year after 180 days operating, typical**Phase Noise L(f) -- Static**

10 Hz -126 dBc/Hz

100 Hz -146 dBc/Hz

1 kHz -160 dBc/Hz

10 kHz -165 dBc/Hz

100 kHz -165 dBc/Hz

**Temperature** $\pm 5 \times 10^{-8}$ , -20°C to +70°C (Ref +25°C) $\pm 2 \times 10^{-7}$ , -40°C to +85°C (Ref +25°C)**MECHANICAL****Dimensions** $\leq 1.03" \times 1.03" \times 0.515"$ **Connectors**

Solder pins on base

**Packaging**

Solder sealed steel can

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

&lt;4W for 3 min

**Total Power**

&lt; 1.5W at +25°C steady state, typical

**Supply Voltage**+12 VDC,  $\pm 5\%$ **ADJUSTMENT****Electrical Tuning** $\pm 1 \times 10^{-6}$ , 0 - 10 VDC

Positive slope

**CRYSTAL****Type**

10 MHz SC-cut

**CRYSTAL****Type**

SC-cut

**-01** 3e-10/g per axis, guaranteed**-02** 2e-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 g<sup>2</sup>/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

**OTHER****Label**

Label as follows:

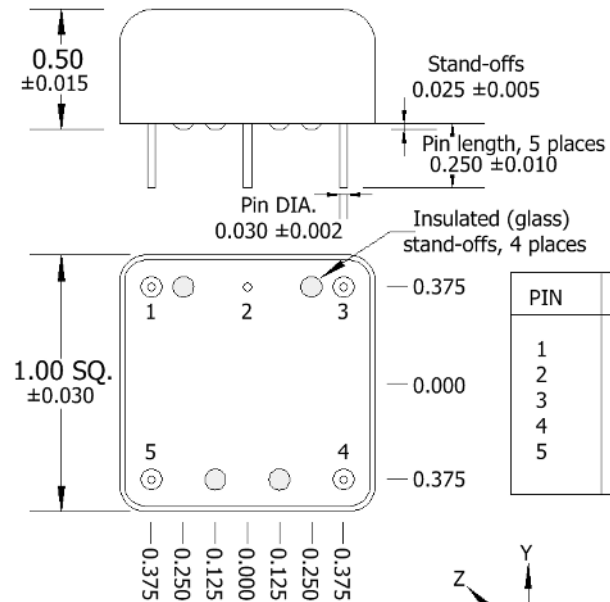
501-33921-XX

10 MHz

VDC

SN – Date Code

REV	DATE	REVISION RECORD	DWN	AUTH
-	04-28-21	Initial Release	BH	LR



PIN	FUNCTION
1	RF Output
2	Ground, Case
3	Electrical Tuning
4	N/C
5	Supply Voltage

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



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**Rugged 10 MHz-SC Onyx IV Crystal Oscillator**

P/N:

**501-33921-XX**

Rev:

-

Date:

**04-28-21**

Drawn:

Ref:

**26709**

Tolerances:  
(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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