

**OUTPUT****Frequency**

100 MHz

**Level**

+13 dBm ±2 dB into 50 ohms

**STABILITY****Aging**

1 x 10<sup>-6</sup> first year  
 after 30 days operating, typical  
 5 x 10<sup>-7</sup> second year, typical

**Phase Noise L(f), dBc/Hz****Static**

100 Hz -130  
 1 kHz -156  
 10 kHz -170  
 20 kHz -170

**Temperature Stability**±2 x 10<sup>-6</sup>, -40° to +71 °C (Ref +25 °C)**Frequency Accuracy**±5 x 10<sup>-7</sup> at +25 °C at time of shipment**Harmonics**

≤-30 dBc

**Spurious**

-90 dBc, DC to 500 MHz,  
 excluding power supply line related  
 spurs

**MECHANICAL****Dimensions**

1.58 x 1.58 x 0.8 inches

**Connectors**

SMA(F) and feed-thru capacitor

**Packaging**

Machined aluminum housing  
 (Nickel Plated)

**Weight**

&lt; 2 ounces

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

&lt;6 Watts for 5 minutes

**Total Power**

&lt;4 Watts at +25 °C

**Supply Voltage**

+15 VDC ±5%

**CRYSTAL****Type**

100 MHz – SC-cut  
 Selected for low g-sensitivity

**ENVIRONMENTAL****Random Vibration - Test Profile**0.05 g<sup>2</sup> /Hz, 10 to 2000 Hz**Shock**

40G, 35 msec, sawtooth pulse

**Operating Temperature**

-40° to +71 °C

**G-sensitivity**

<3e-10 per g, per axis, evaluated at  
 100 Hz

**OTHER****Test Data**

Output level  
 Phase noise, static  
 Phase noise under vibration plot  
 G-sensitivity in 3 axes at 100 Hz  
 Temperature stability  
 Harmonics, spurious  
 Total power

REV	DATE	REVISION RECORD	DWN	AUTH
-	01-17-11	Draft	Liz	
A	02-23-11	Outline, Pin-out, static noise, test data, g-sense, temp	Liz	

**Wenzel Associates, Inc.**

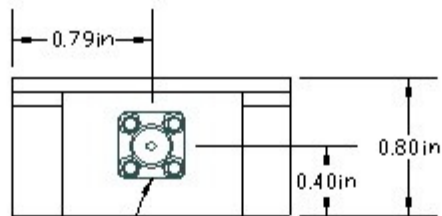
Austin, Texas

Title:

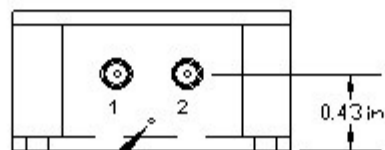
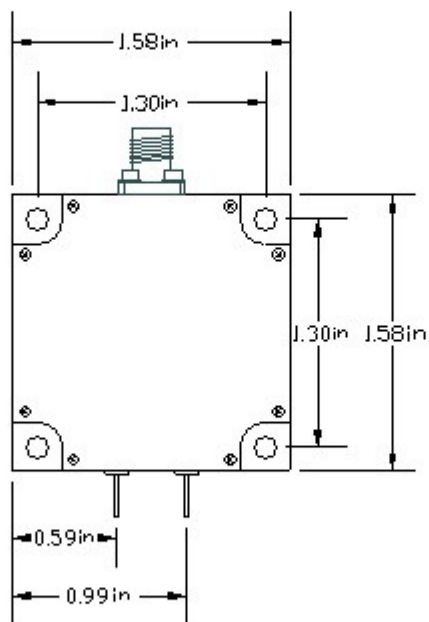
**100 MHz Premium Low-G Oscillator for Shock & Vibration**

P/N: <b>501-23500</b>	Rev: <b>A</b>	Date: <b>02-23-11</b>	Drawn:	Ref: 501-20288
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>	Page 1 of 2

REV	DATE	REVISION RECORD	DWN	AUTH
-	05-17-10	Draft	VG	
A	2-23-11	Outline, Pin-out, static noise, test data, g-sense, temp	Liz	



Field-removable SMA



Vent Hole  
Actual Location TBD

PIN	FUNCTION
1	Ground, Case
2	Supply Voltage

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Austin, Texas

Title:

### 100 MHz Premium Low-G Oscillator for Shock & Vibration

P/N: <b>501-23500</b>	Rev: <b>A</b>	Date: <b>02-23-11</b>	Drawn:	Ref: 501-20288
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