

OUTPUT**Frequency**

100 MHz

Level

+13 dBm ± 2 dB into 50 ohms

G*: +13 dBm ±3 dB into 50 ohms

STABILITY**Aging (typical)**1 x 10⁻⁶ per year after 30 days operating5 x 10⁻⁷ second year3 x 10⁻⁷ per year, thereafter**Phase Noise L(f)****Standard****Premium**

100 Hz -125 dBc/Hz -130 dBc/Hz

1 kHz -150 dBc/Hz -155 dBc/Hz

10 kHz -165 dBc/Hz -168 dBc/Hz

100 kHz -165 dBc/Hz -170 dBc/Hz

Temperature StabilityE: ±2 x 10⁻⁷, 0° to +50°C (Ref +25°C)F: ±5 x 10⁻⁷, -20 to +70°C (Ref +25°C)G*: ±2 x 10⁻⁶, -55° to +85°C (Ref +25°C)**Harmonics**

≤ -30 dBc

Spurious

≤ -80 dBc, excluding power

supply line related spurs

MECHANICAL**Packaging**

Solder sealed steel can

Dimensions

A: 1.5 x 1.5 x 0.5"

B: 1.5 x 1.5 x 0.75"

Connectors / Mounting

A: Solder pins on base; Thru-hole PCB mount

B: SMB(f) and solder pins on side;
threaded inserts, #4-40, 4 places**POWER REQUIREMENTS****Warm-Up Power**

≤ 5 Watts for less than 3 minutes at +25°C

G*: ≤ 6 Watts for 5 minutes at +25°C

Total Power

≤ 2.2 Watts at +25°C

G*: ≤ 3 Watts at +25°C

Supply Voltage

+15 VDC ±5% or +12 VDC ±5%

ADJUSTMENT

(consult factory for non standard tuning options)

Mechanical Tuning±4 x 10⁻⁶**Electrical Tuning**±5 x 10⁻⁷, ±5 VDC, Negative slope**CRYSTAL****Type**

100 MHz SC-cut

Acceleration Sensitivity

Select desired sensitivity

5: 5e-10 per g, per axis typical

3: 3e-10 per g, per axis typical

2: 2e-10 per g, per axis typical

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-25-13	Initial Release	CB	

**Wenzel Associates, Inc.**

Austin, Texas

Title:

100 MHz-SC L.O. Series Crystal Oscillator

P/N: 501-27512-xx	Rev: -	Date: 11-25-13	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 3

Ordering Options

-xx	G-Sensitivity	Voltage	Phase Noise L(f)	Package	Temp (Ref +25 °C)
01	5	+15V	Standard	A	E
02	5	+15V	Standard	A	F
03	5	+15V	Standard	A	G
05	5	+15V	Standard	B	E
06	5	+15V	Standard	B	F
07	5	+15V	Standard	B	G
11	5	+15V	Premium	A	E
12	5	+15V	Premium	A	F
13	5	+15V	Premium	A	G
15	5	+15V	Premium	B	E
16	5	+15V	Premium	B	F
17	5	+15V	Premium	B	G
21	5	+12V	Standard	A	E
22	5	+12V	Standard	A	F
23	5	+12V	Standard	A	G
25	5	+12V	Standard	B	E
26	5	+12V	Standard	B	F
27	5	+12V	Standard	B	G
31	5	+12V	Premium	A	E
32	5	+12V	Premium	A	F
33	5	+12V	Premium	A	G
35	5	+12V	Premium	B	E
36	5	+12V	Premium	B	F
37	5	+12V	Premium	B	G

-xx	G-Sensitivity	Voltage	Phase Noise L(f)	Package	Temp (Ref +25 °C)
41	3	+15V	Standard	A	E
42	3	+15V	Standard	A	F
43	3	+15V	Standard	A	G
45	3	+15V	Standard	B	E
46	3	+15V	Standard	B	F
47	3	+15V	Standard	B	G
51	3	+15V	Premium	A	E
52	3	+15V	Premium	A	F
53	3	+15V	Premium	A	G
55	3	+15V	Premium	B	E
56	3	+15V	Premium	B	F
57	3	+15V	Premium	B	G
61	3	+12V	Standard	A	E
62	3	+12V	Standard	A	F
63	3	+12V	Standard	A	G
65	3	+12V	Standard	B	E
66	3	+12V	Standard	B	F
67	3	+12V	Standard	B	G
71	3	+12V	Premium	A	E
72	3	+12V	Premium	A	F
73	3	+12V	Premium	A	G
75	3	+12V	Premium	B	E
76	3	+12V	Premium	B	F
77	3	+12V	Premium	B	G

-xx	G-Sensitivity	Voltage	Phase Noise L(f)	Package	Temp (Ref +25 °C)
81	2	+15V	Standard	A	E
82	2	+15V	Standard	A	F
83	2	+15V	Standard	A	G
85	2	+15V	Standard	B	E
86	2	+15V	Standard	B	F
87	2	+15V	Standard	B	G
91	2	+12V	Standard	A	E
92	2	+12V	Standard	A	F
93	2	+12V	Standard	A	G
95	2	+12V	Standard	B	E
96	2	+12V	Standard	B	F
97	2	+12V	Standard	B	G

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Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches

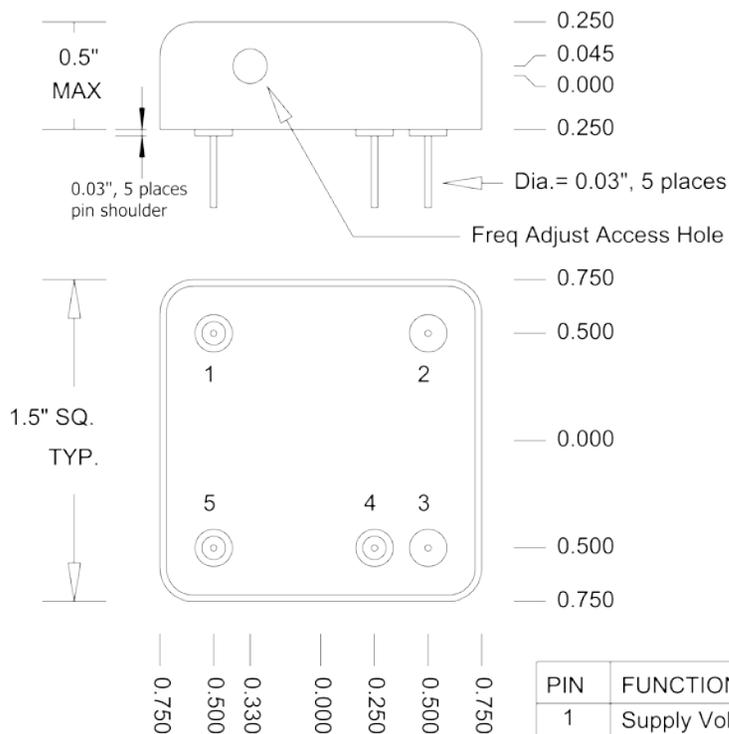
0.XX Dec:
±0.030"

0.XXX Dec:
±0.010"

FSCM:
62821

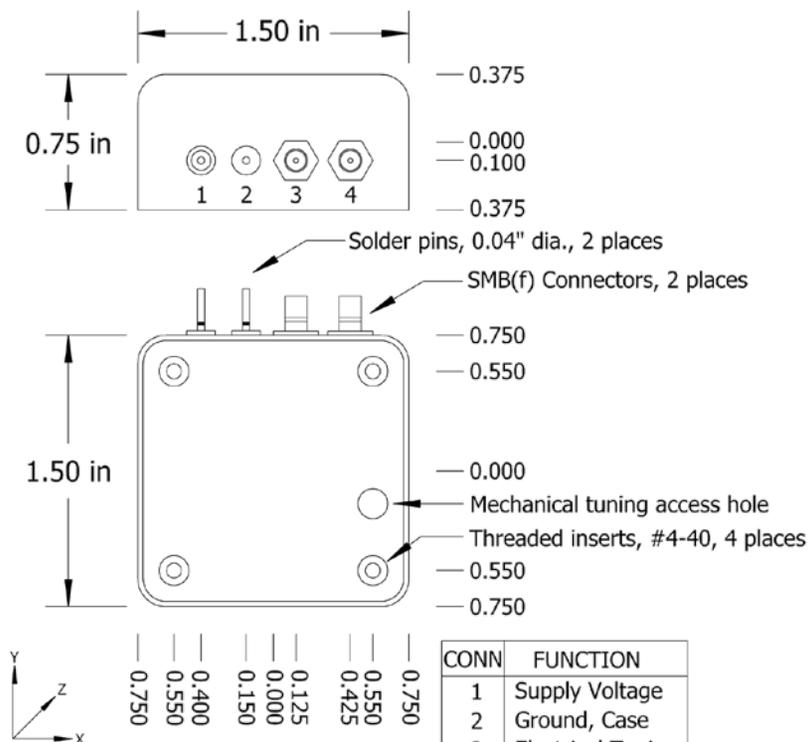
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Package A



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

Package B



Connector numbers are for reference only, and are not marked on unit.

CONN	FUNCTION
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output

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Austin, Texas

Title:

100 MHz-SC L.O. Series Crystal Oscillator

P/N:
501-27512-xx

Rev:
-

Date:
11-25-13

Drawn:

Ref:
501-04558

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:
±0.030"

0.XXX Dec:
±0.010"

FSCM:
62821

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