

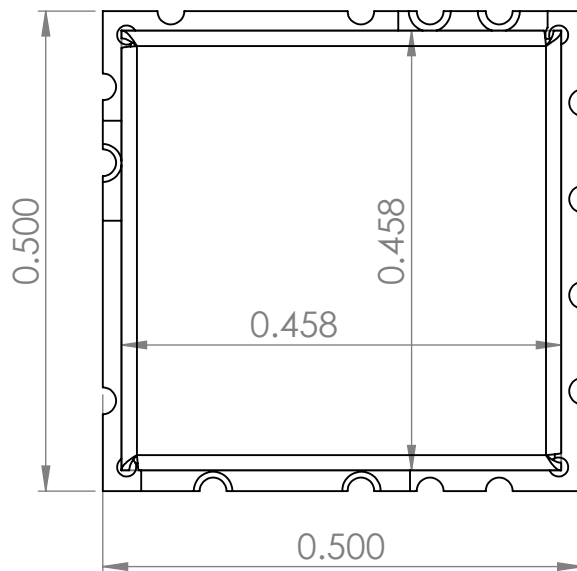


						Production	First Article
	MIN	TYP	MAX	UNITS	NOTES	Test	Test
Fout		9.580		GHz	1	☐	☐
Fout/2		4.790		GHz	1	☐	☐
Tuning Voltage	0		12	V	1	☐	☐
Modulation Sensitivity (@ Fout/2)		4		MHz/V	1,7	☐	☐
Operates with Vtune = 0V					1	☐	☐
Output Power Fout	4	8	12	dBm	1	☐	☐
Output Power Fout/2	-5	0	5	dBm	1	☐	☐
Phase Noise @ 9.580 GHz							
1 KHz Offset		-66	-62	dBc/Hz	1,7	☐	☐
10 KHz Offset		-100	-96	dBc/Hz	1,7	☐	☐
50 KHz Offset		-118	-114	dBc/Hz	1,7	☐	☐
100 KHz Offset		-125	-121	dBc/Hz	1,7	☐	☐
200 KHz Offset		-130	-126	dBc/Hz	1,7	☐	☐
400 KHz Offset		-137	-133	dBc/Hz	1,7	☐	☐
1 MHz Offset		-147	-143	dBc/Hz	1,7	☐	☐
2 MHz Offset		-154	-150	dBc/Hz	1,7	☐	☐
5 MHz Offset		-155	-155	dBc/Hz	1,7	☐	☐
10 MHz Offset		-155	-155	dBc/Hz	1,7	☐	☐
DSB Integrated Noise			-60.5	dB	2,9	☐	☐
SSB Integrated Noise			-57.5	dB	2,9	☐	☐
Pushing		2		MHz/V	3,7	☐	☐
Pulling (12dB RL, any phase)		0.3		MHz _{p-p}	3,7	☐	☐
Modulation Bandwidth		5		MHz	4	☐	☐
Tuning Port Capacitance		22	47	pF	2	☐	☐
Harmonics & Subharmonics							
f/2			-20	dBc	1	☐	☐
2nd		-20		dBc	1,7	☐	☐
3f/2			-20	dBc	1	☐	☐
3rd		-30		dBc	4	☐	☐
Vcc_vco		8.0		V	1	☐	☐
Icc_vco		50		mA	1,7	☐	☐
Vcc_amp		5		V	1	☐	☐
Icc_amp		35		mA	1,7	☐	☐
Operating Temperature	-40		+85	C	3	☐	☐
Package		M500_2			6,8	☐	☐
LxW		0.500		inch sq.	5	☐	☐
Height			0.110	inch	5	☐	☐

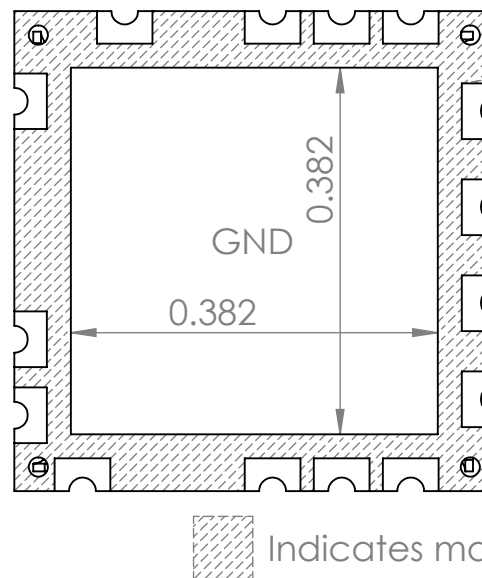
Notes

1. Tested in production, and guaranteed
2. Per current design, not a tested parameter
3. Sample tested from production lot
4. Not a tested or guaranteed design goal
5. By inspection
6. RoHS compliant
7. Design goal subject to change
8. Solder mask & ground paddle on bottom of unit
9. 2.5 KHz ~ 120 MHz when phase locked with LMX2820 and suitable reference

TOP VIEW - TOP SIDE

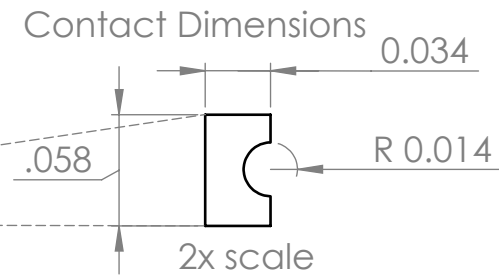
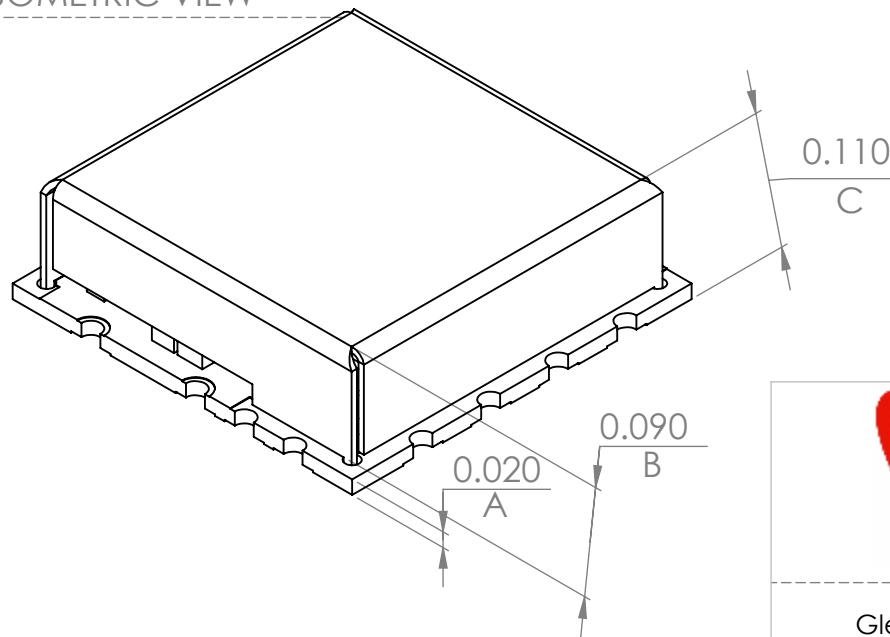


BOTTOM VIEW - BOTTOM SIDE



 Indicates mask.

ISOMETRIC VIEW



Notes

All dimensions displayed are in inches.

All tolerances are ± 0.005 "

A: Measures total board height.

B: Measures total shield height.

C: Measures overall height.

A square ground pad is depicted in the bottom view it measures 0.382" square.



Glenn Epps

05/22/24

All dimensions given in inches, all tolerances = ± 0.005 "

Title:

SMX_M500_2_110

SIZE
A

DWG. NO.

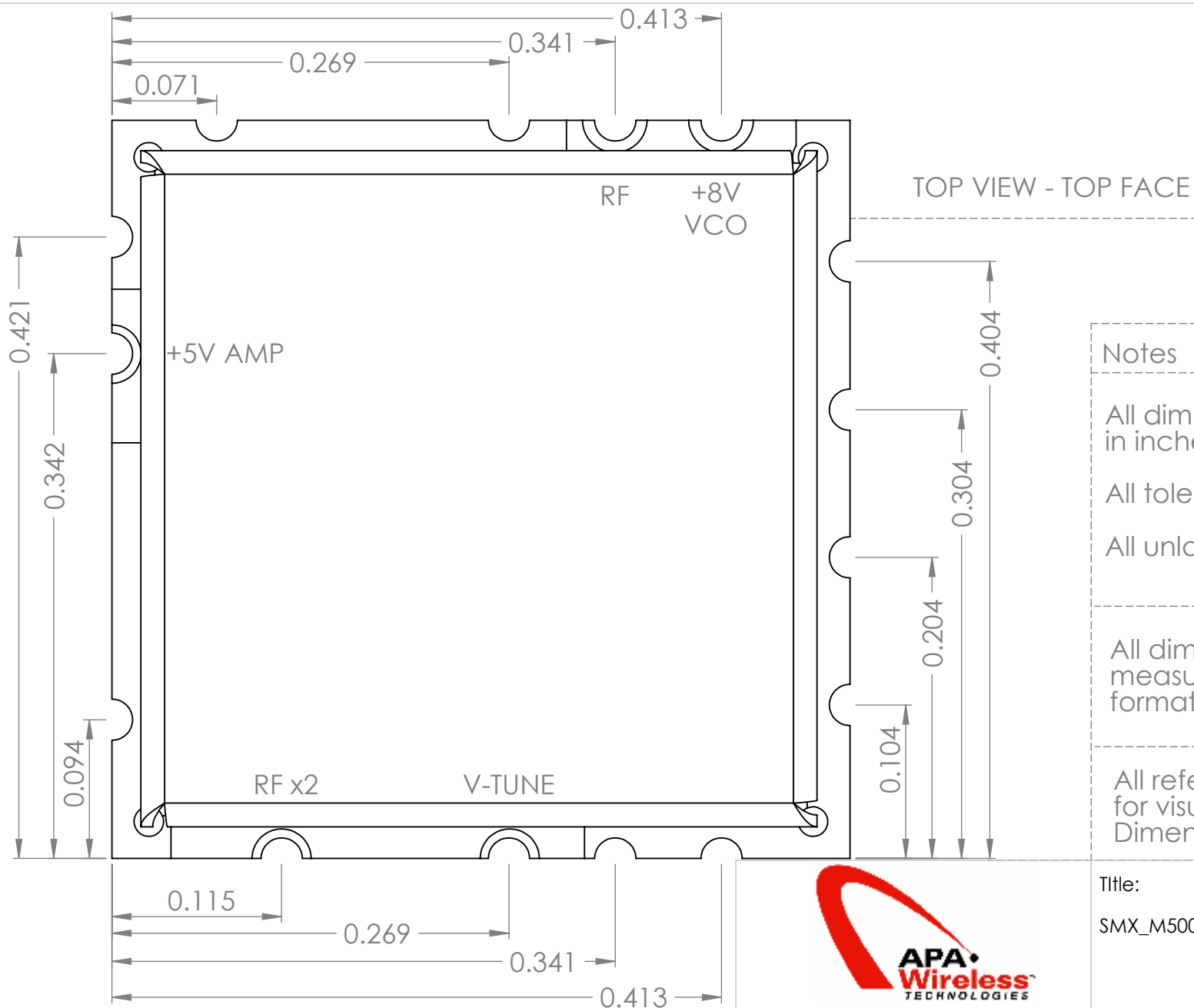
1

REV
A

5:1 SCALE

unit: inch

SHEET 1 OF 2



Notes

All dimensions displayed are in inches.

All tolerances are +/- 0.005"

All unlabeled ports are GND.

All dimensions are measured in a baseline format.

All references to scale are for visual reference only. Dimensions are always 1:1



Glenn Epps

05/22/24

All dimensions given in inches, all tolerances = ± 0.005 "

Title:

SMX_M500_2_110

SIZE
A

DWG. NO.

1

REV
A

10:1 SCALE

unit: inch

SHEET 2 OF 2

SMX_M500_2 FOOTPRINT (top view)

