



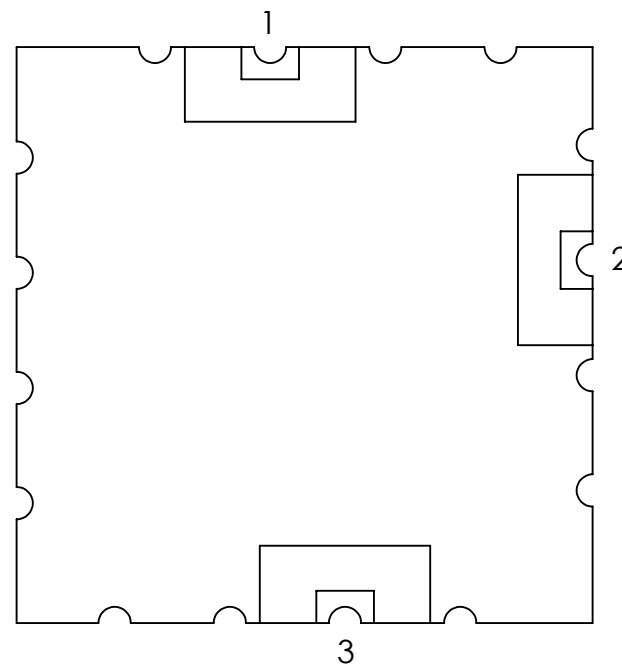
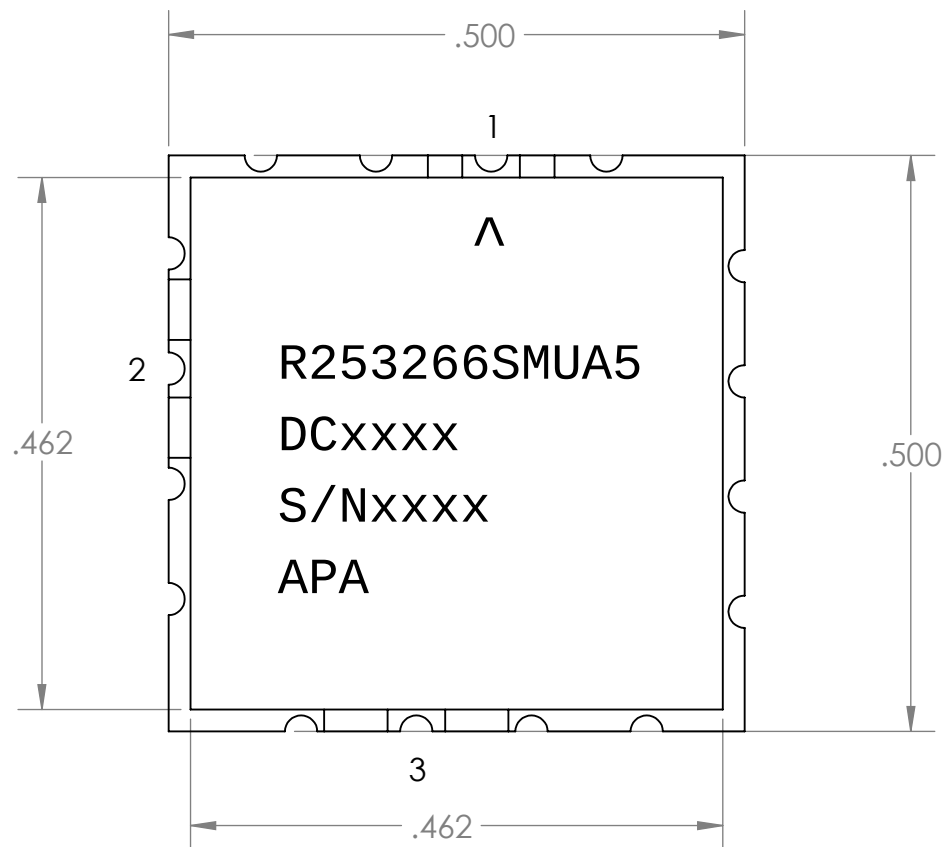
# VCO R253266SMUA5

rev\_0            initial rev  
rev\_1            Vtune  
rev\_2            Kv, Icc

|                          | <u>MIN</u> | <u>TYP</u> | <u>MAX</u> | <u>UNITS</u> | <u>NOTES</u> | <u>Production Test</u> | <u>First Article Test</u> |
|--------------------------|------------|------------|------------|--------------|--------------|------------------------|---------------------------|
| Frequency Range          | 2537.5     |            | 2662.5     | MHz          | 1            | ..                     | ..                        |
| Tuning Voltage           | 0.5        |            | 4.5        | V            | 1            | ..                     | ..                        |
| Modulation Sensitivity   |            | 50         |            | MHz/V        | 1            | ..                     | ..                        |
| Operates with Vtune = 0V |            |            |            |              | 1            | ..                     | ..                        |
| Output Power             | 3          | 5          | 7          | dBm          | 1,6          | ..                     | ..                        |
| Phase Noise @            |            |            |            |              |              |                        |                           |
| 1 KHz Offset             |            | -76        |            | dBc/Hz       | 1            | ..                     | ..                        |
| 10 KHz Offset            |            | -103       |            | dBc/Hz       | 1            | ..                     | ..                        |
| 100 KHz Offset           |            | -123       |            | dBc/Hz       | 1            | ..                     | ..                        |
| 1MHz Offset              |            | -143       |            | dBc/Hz       | 1            | ..                     | ..                        |
| 10 MHz Offset            |            | -160       |            | dBc/Hz       | 1            | ..                     | ..                        |
| Pushing                  |            | 0.5        | 1          | MHz/V        | 3            | ..                     | ..                        |
| Pulling (12 dB R.L.)     |            | 2          | 3          | MHz          | 3            | ..                     | ..                        |
| Modulation Bandwidth     | 1          |            |            | MHz          | 4            | ..                     | ..                        |
| Tuning Port Capacitance  |            | 20         |            | pF           | 2            | ..                     | ..                        |
| Harmonics                |            | -20        | -10        | dBc          | 3            | ..                     | ..                        |
| Vcc                      |            | 5.0        |            | V            | 5            | ..                     | ..                        |
| Icc                      |            | 30         |            | mA           | 1            | ..                     | ..                        |
| Operating Temperature    | -40        |            | +85        | C            | 3            | ..                     | ..                        |
| Package                  |            | SMUA       |            |              |              |                        |                           |
| LxW                      |            | 0.500      |            | inch sq.     | 5            | ..                     | ..                        |
| Height                   |            | 0.220      |            | 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. Power flatness is +/- 2dB across frequency



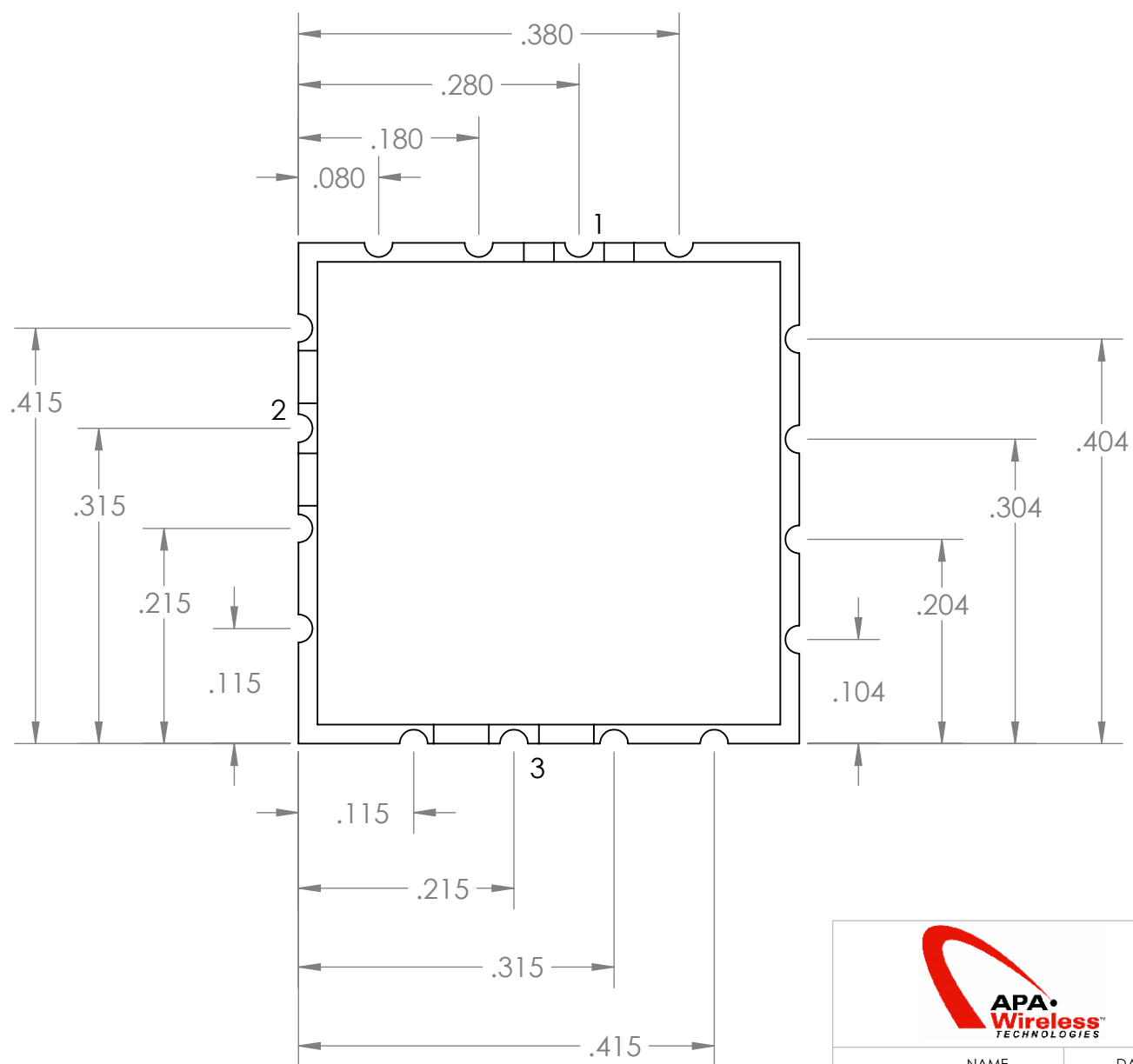
| CONTACT ASSIGNMENTS           |        |
|-------------------------------|--------|
| 1.                            | RF OUT |
| 2.                            | VCC    |
| 3.                            | V-TUNE |
| ALL OTHER CONTACTS ARE GROUND |        |



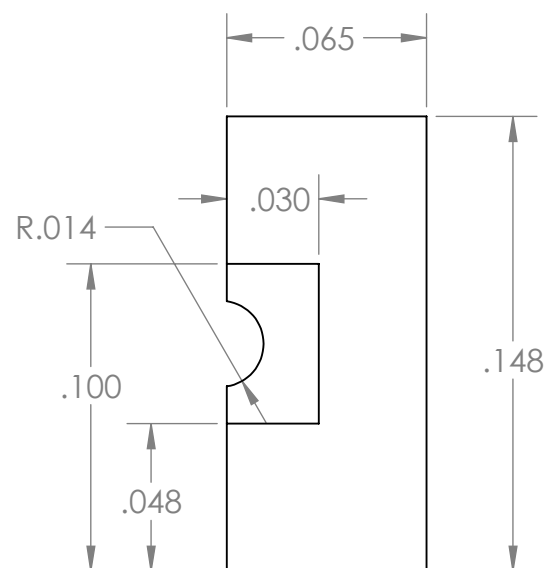
|       |                        |                   |
|-------|------------------------|-------------------|
| DRAWN | NAME<br>Stefan Babulal | DATE<br>2/20/2017 |
|-------|------------------------|-------------------|

COMMENTS:  
All dimensions are in inches.  
Tolerances  $\pm 0.005$  unless otherwise noted

|                        |               |              |
|------------------------|---------------|--------------|
| TITLE:<br>SMUA PACKAGE |               |              |
| SIZE<br><b>A</b>       | DWG. NO.<br>1 | REV          |
| SCALE: 6:1             | unit: inch    | SHEET 1 OF 2 |



## CONTACT DIMENSIONS



Scale: 16:1



DRAWN

NAME  
Stefan Babulal

DATE

2/20/2017

### COMMENTS:

All dimensions are in inches.  
Tolerances  $\pm 0.005$  unless otherwise noted

TITLE:

SMUA PACKAGE

SIZE  
**A**

DWG. NO.

1

REV

SCALE: 6:1

unit: inch

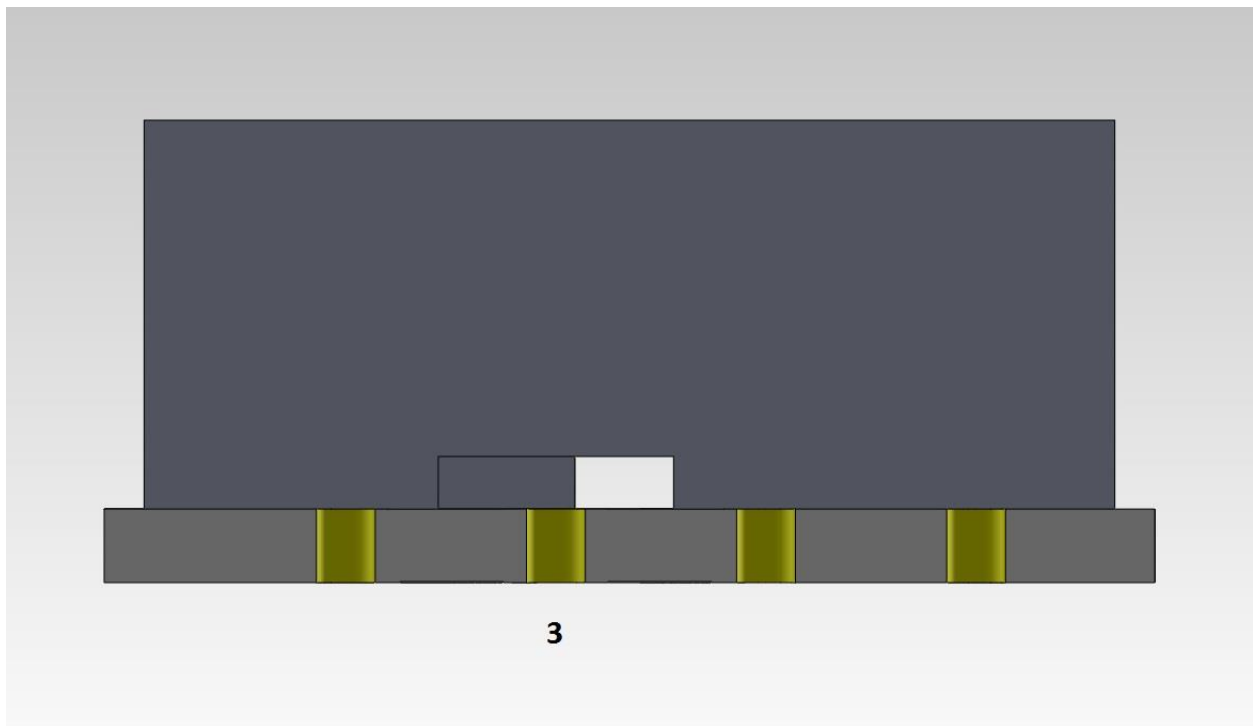
SHEET 2 OF 2



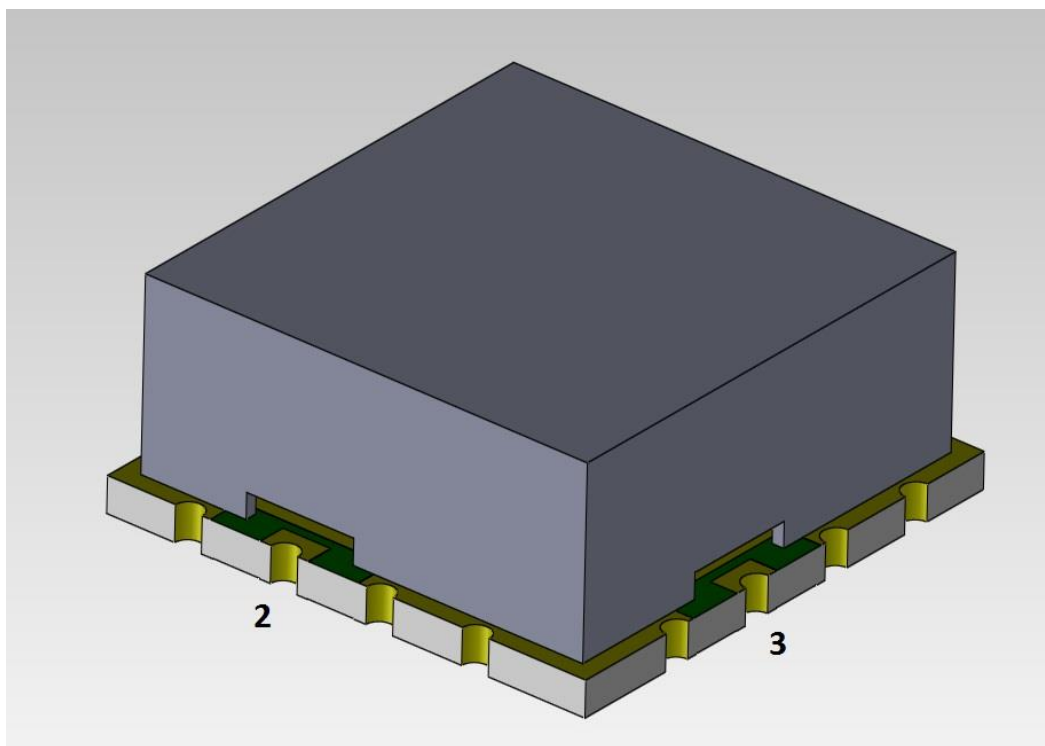
TOP VIEW



BOTTOM VIEW



SIDE VIEW



ISOMETRIC VIEW