



# VCO R4900SMUA5CR

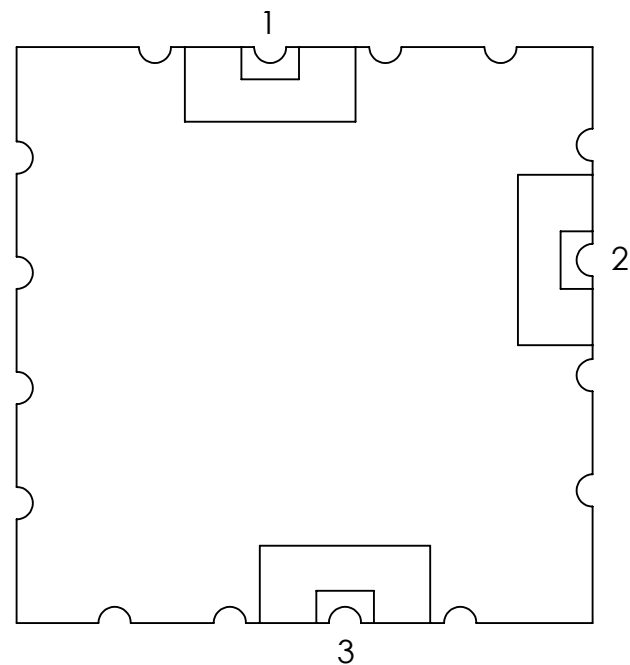
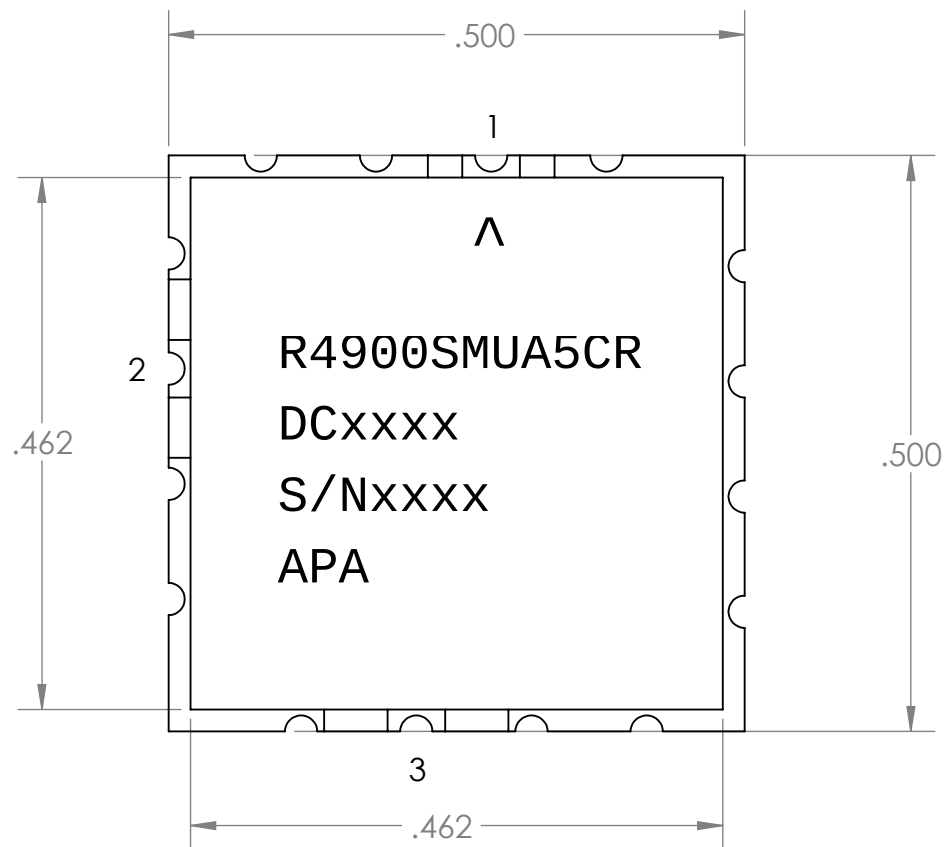
rev\_0

initial rev

|                              | <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              |            | 4900       |            | MHz                | 1            | ..                     | ..                        |
| Tuning Voltage               | 0.5        |            | 5          | V                  | 1            | ..                     | ..                        |
| Modulation Sensitivity       |            | 10         |            | MHz/V              | 1,7          | ..                     | ..                        |
| Operates with Vtune = 0V     |            |            |            |                    | 1            | ..                     | ..                        |
| Output Power                 | 5          | 7          | 9          | dBm                | 1            | ..                     | ..                        |
| Phase Noise @                |            |            |            |                    |              |                        |                           |
| 1 KHz Offset                 |            | -87        | -82        | dBc/Hz             | 1            | ..                     | ..                        |
| 10 KHz Offset                |            | -113       | -108       | dBc/Hz             | 1            | ..                     | ..                        |
| 100 KHz Offset               |            | -133       | -128       | dBc/Hz             | 1            | ..                     | ..                        |
| 1 MHz Offset                 |            | -153       | -148       | dBc/Hz             | 1            | ..                     | ..                        |
| 10 MHz Offset                |            | -167       | -162       | dBc/Hz             | 1            | ..                     | ..                        |
| Pushing                      |            | 0.1        |            | MHz/V              | 3            | ..                     | ..                        |
| Pulling (12dB RL, any phase) |            | 0.5        |            | MHz <sub>p-p</sub> | 3            | ..                     | ..                        |
| Modulation Bandwidth         |            | 1          |            | MHz                | 4            | ..                     | ..                        |
| Tuning Port Capacitance      |            |            | 33         | pF                 | 2            | ..                     | ..                        |
| Harmonics                    |            | -15        | -10        | dBc                | 3            | ..                     | ..                        |
| Vcc                          |            | 5.0        |            | V                  |              | ..                     | ..                        |
| Icc                          |            | 28         |            | mA                 | 1,7          | ..                     | ..                        |
| Operating Temperature        | -40        |            | +85        | C                  | 3            | ..                     | ..                        |
| Package                      |            | SMUA       |            |                    | 6            | ..                     | ..                        |
| 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. RoHS Compliant
7. Design goal subject to change



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



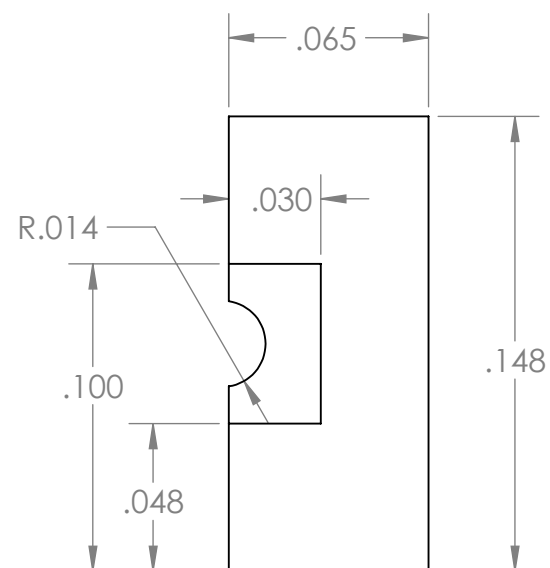
|       |                        |                   |
|-------|------------------------|-------------------|
| DRAWN | NAME<br>Stefan Babulal | DATE<br>2/20/2017 |
|-------|------------------------|-------------------|

COMMENTS:  
All dimensions are in inches.  
Tolerances ± 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.  
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TITLE:

SMUA PACKAGE

| SIZE     | DWG. NO. | REV |
|----------|----------|-----|
| <b>A</b> | 1        |     |

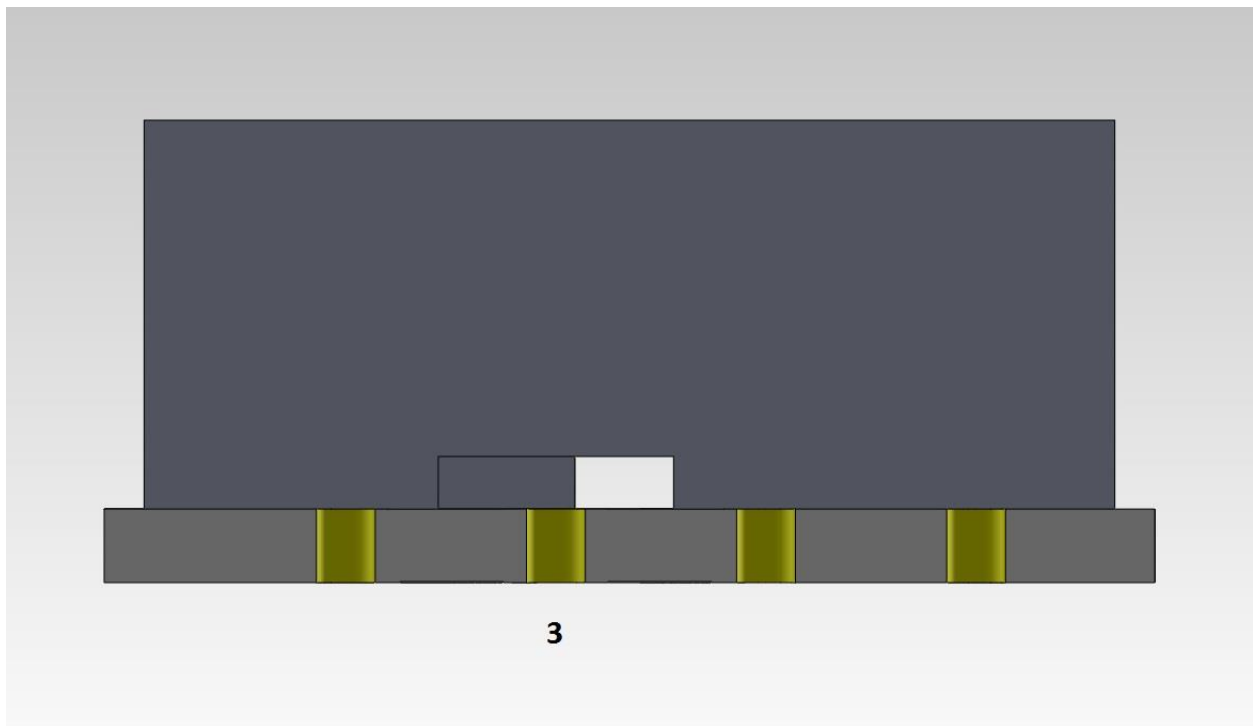
|            |            |              |
|------------|------------|--------------|
| SCALE: 6:1 | unit: inch | SHEET 2 OF 2 |
|------------|------------|--------------|



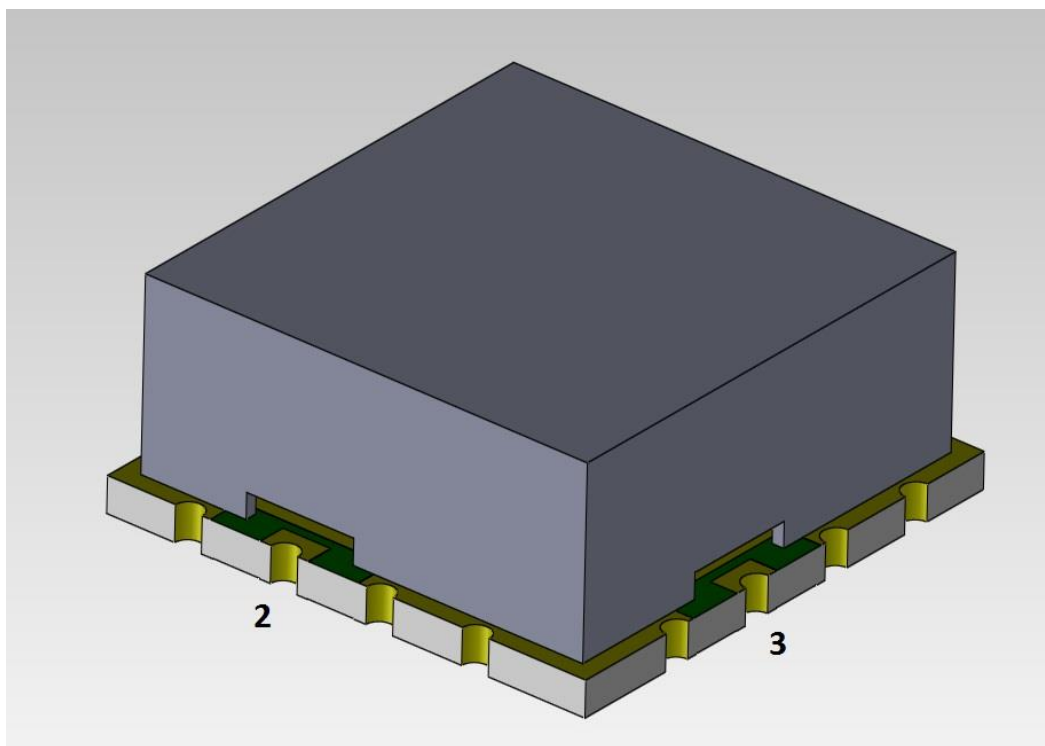
TOP VIEW



BOTTOM VIEW



SIDE VIEW



ISOMETRIC VIEW