



|                              | <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              | 250        |            | 275        | MHz                | 1            | ..                     | ..                        |
| Tuning Voltage               | 0.5        |            | 4.5        | V                  | 1            | ..                     | ..                        |
| Modulation Sensitivity       | 10         | 15         | 20         | MHz/V              | 1,8          | ..                     | ..                        |
| Operates with Vtune = 0V     |            |            |            |                    | 1            | ..                     | ..                        |
| Output Power                 | 5          | 7          | 9          | dBm                | 1            | ..                     | ..                        |
| Phase Noise @                |            |            |            |                    |              |                        |                           |
| 1 KHz Offset                 |            | -78        | -73        | dBc/Hz             | 1            | ..                     | ..                        |
| 10 KHz Offset                |            | -103       | -98        | dBc/Hz             | 1            | ..                     | ..                        |
| 100 KHz Offset               |            | -123       | -118       | dBc/Hz             | 1            | ..                     | ..                        |
| 1 MHz Offset                 |            | -143       | -138       | dBc/Hz             | 1            | ..                     | ..                        |
| 10 MHz Offset                |            | -163       | -158       | dBc/Hz             | 1            | ..                     | ..                        |
| Pushing                      |            | 1.5        |            | MHz/V              | 3            | ..                     | ..                        |
| Pulling (12dB RL, any phase) |            | 10         |            | MHz <sub>p-p</sub> | 3            | ..                     | ..                        |
| Modulation Bandwidth         |            | 0.1        |            | MHz                | 4            | ..                     | ..                        |
| Tuning Port Capacitance      |            | 330        |            | pF                 | 2            | ..                     | ..                        |
| Harmonics                    |            | -10        |            | dBc                | 3            | ..                     | ..                        |
| Vcc                          |            | 3.3        |            | V                  |              | ..                     | ..                        |
| Icc                          |            | 11         |            | mA                 | 1            | ..                     | ..                        |
| Operating Temperature        | -40        |            | +85        | C                  | 3            | ..                     | ..                        |
| Package                      |            | SMVS       |            |                    | 6,7          | ..                     | ..                        |
| LxW                          |            | 0.175      |            | inch sq.           | 5            | ..                     | ..                        |
| Height                       |            | 0.075      |            | inch               | 5            | ..                     | ..                        |

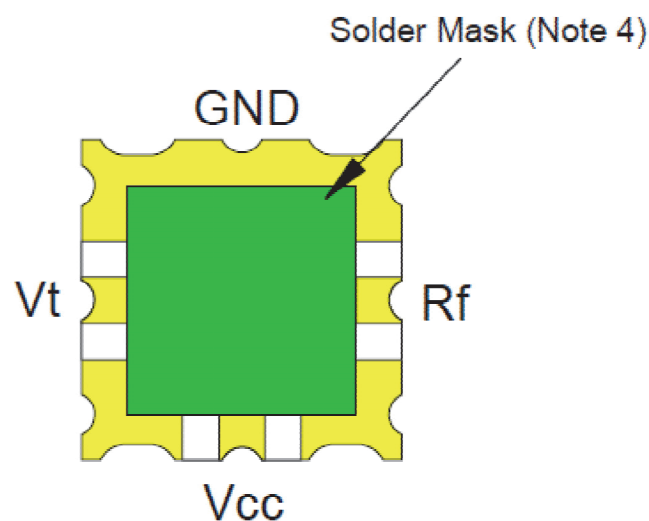
#### Notes

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. Soldermasked footprint
8. Design goal subject to change

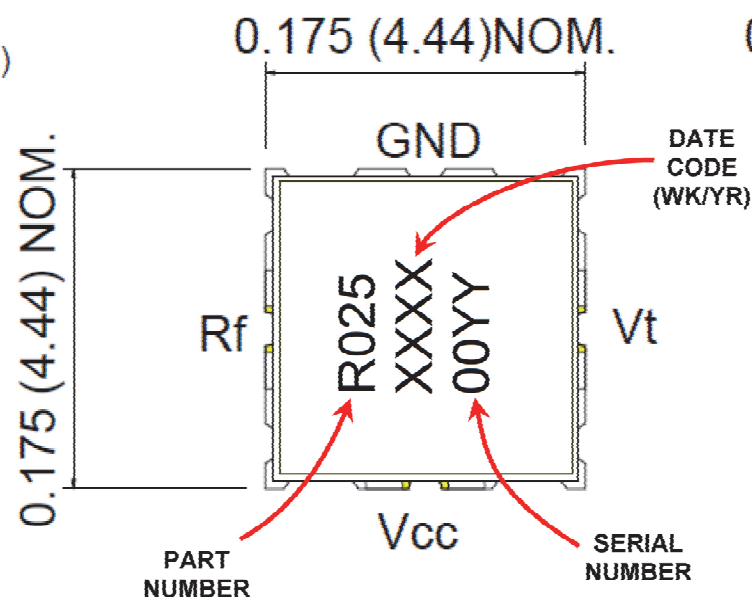
# VS Package dimensions (Units; inches (mm))



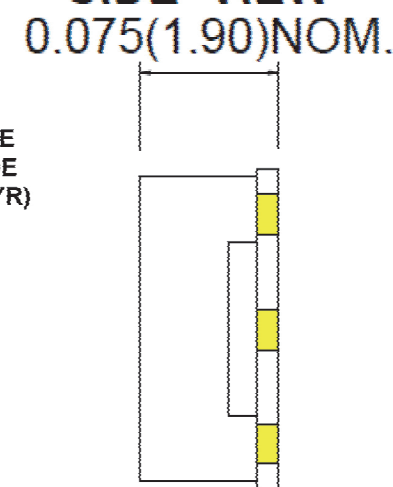
## BOTTOM VIEW



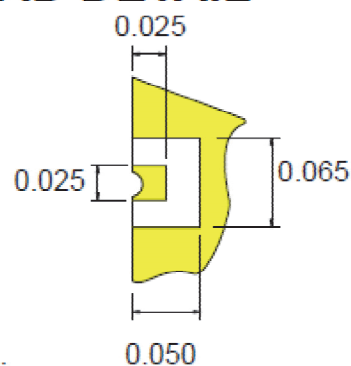
## TOP VIEW



## SIDE VIEW



## PAD DETAIL



### Notes:

1. The case is ground.
2. Unless otherwise specified all dimensions are in inches.
3. Unless otherwise specified finish is 150-250 micro inches electroless nickel over copper clad PCB, 2-5 micro inches immersion gold, over nickel
4. Solder mask not used for applications greater than 6GHz

| PIN    | CON. |
|--------|------|
| 1      | Vcc  |
| 3      | Rf   |
| 7      | Vt   |
| Others | Gnd  |

## PCB pad layout

