VCO R8000SMUAM8CR_100



rev_0 initial rev
rev_1 Vt,Pout, PN, Icc
rev_2 Pout, Vtune
Mask
rev_3 Kv, Freq, Pout
PN, Icc

| | MIN | <u>TYP</u> | MAX | <u>UNITS</u> | <u>NOTES</u> | Production <u>Test</u> | <u>Test</u> |
|------------------------------|------|------------|-------|-------------------------------|--------------|------------------------|-------------|
| Frequency Range | | 8000 | | MHz | 1 | •• | •• |
| Tuning Voltage | 0.5 | | 9.5 | V | 1 | •• | •• |
| Vtune @+25C and 8GHz | 3 | | 5 | V | 1 | •• | •• |
| Freq. @+25C and Vtune = 1V | | | 7980 | MHz | 1 | •• | •• |
| Freq. @+25C and Vtune = 8V | 8030 | | | MHz | 1 | •• | •• |
| K _v @Vtune = 3V | 15 | | 37 | MHz/V | 1 | •• | •• |
| K _v @Vtune = 4V | 12 | | 33 | MHz/V | 1 | •• | •• |
| K _v @Vtune = 5V | 9 | | 30 | MHz/V | 1 | •• | •• |
| Operates with Vtune = 0V | | | | | 1 | •• | •• |
| Output Power - Fundamental | -1 | 1.5 | 4 | dBm | 1 | •• | •• |
| Phase Noise @ | | | | | | | |
| 1 KHz Offset | | -73 | | dBc/Hz | 1 | •• | •• |
| 10 KHz Offset | | -100 | | dBc/Hz | 1 | •• | •• |
| 100 KHz Offset | | -120 | | dBc/Hz | 1 | •• | •• |
| 1 MHz Offset | | -140 | | dBc/Hz | 1 | • • | • • |
| 10 MHz Offset | | -160 | | dBc/Hz | 1 | • • | • • |
| Pushing | | 5 | | MHz/V | 3 | •• | • • |
| Pulling (12dB RL, any phase) | | 0.5 | | $\mathrm{MHz}_{\mathrm{p-p}}$ | 3 | • • | • • |
| Modulation Bandwidth | | 1 | | MHz | 4 | •• | •• |
| Tuning Port Capacitance | | 20 | | pF | 2 | • • | • • |
| Harmonics | | -15 | -10 | dBc | 3 | • • | • • |
| Vcc | 7.75 | 8.0 | 8.25 | V | | | |
| Icc | | 46 | 61 | mA | 1 | • • | • • |
| Operating Temperature | -40 | | +85 | С | 3 | • • | • • |
| Package | | SMUAM | | | 6,8 | •• | •• |
| LxW | | 0.500 | | inch sq. | 5 | •• | • • |
| Height | | | 0.103 | inch | 5 | •• | •• |

<u>Notes</u>

- 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. Bottom of the pcb has solder mask