

Dynamic Engineers Inc.

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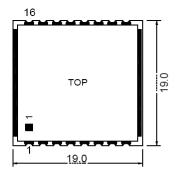
Features and Benefits

Frequency Range: 1990-2050MHz Supply Voltage: 5.0V Current: 35mA Max. 3 wire serial Fractional PLL Output power: +2.0dBm Max. Phase noise: -109dBc/Hz@10KHz Operating temperature: -40°C--+85°C Size: 19.0x19.0x6mm Package type: SMD

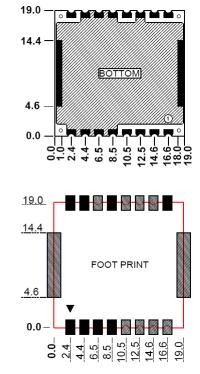
Typical Applications

SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

Mechanical Drawing & Pin Connections







PLL1919BQ-LN1-1990MHz-2050MHz-A 1990-2050MHz SMD Phase Locked Loop (PLL) Synthesizer

Drawing No:

MD240074-1

Pin Connections:

| Pin | Function | | |
|-------|-------------|--|--|
| 1 | CLK | | |
| 2 | DATA | | |
| 3 | LE | | |
| 4 | Ref. IN | | |
| 5-8 | GND | | |
| 9 | VCC(VCO) | | |
| 10-12 | GND | | |
| 13 | RF Out | | |
| 14 | GND | | |
| 15 | Vcp(PLL) | | |
| 16 | Lock Detect | | |
| 17&18 | GND | | |

Unit in mm 1mm = 0.0394 inches

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and graphs without notification to potential customers who may have earlier revisions in their possession.



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Specifications

| Parameter | | Units | Min. | Typical | Max. |
|--------------------------------|----------------|----------|------|---------|------|
| Operating Frequency Range | | MHz | 1990 | | 2050 |
| Output Power | | dBm | -2.0 | 0.0 | +2.0 |
| Step Size | | KHz | | 50 | |
| Settling Time | | msec | | 10 | 30 |
| Output Impedance | | Ω | | 50 | |
| Phase Noise | @1kHz offset | dBc / Hz | | -70 | -65 |
| Phase Noise | @10kHz offset | dBc / Hz | | -109 | -104 |
| Phase Noise | @100kHz offset | dBc / Hz | | -134 | -129 |
| Phase Noise | @1MHz offset | dBc / Hz | | -153 | -148 |
| 2nd Harmonic Suppression | | dBc | | -23 | -20 |
| Sideband Spurious Suppression | | dBc | | | -65 |
| Reference (input frequency) | | MHz | 5 | | 100 |
| Reference (input level) | | dBm | -5 | | +5 |
| VCO Power Supply (Vcc) Voltage | | Vdc | | 5 | |
| VCO Power Supply (Vcc) Current | | mA | | 25 | 35 |
| PLL Power Supply (Vcp) Voltage | | Vdc | | 5 | |
| PLL Power Supply (Vcp) Current | | mA | | 5 | 10 |
| Operating Temperature Range | | С° | -40 | | +85 |