

Dynamic Engineers Inc.

Website: www.DynamicEngineers.com Email: Inquiry@DynamicEngineers.com PLL1919BQ-LN2-2173.5MHz-2205MHz-A 2173.5-2205MHz SMD Phase Locked Loop (PLL) Synthesizer

Features and Benefits

Frequency Range: 2173.5-2205MHz

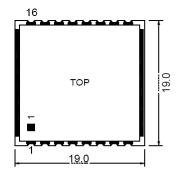
Supply Voltage: 5.0V Current: 40mA Max. 3 wire serial Fractional PLL Output power: +5.0dBm Max. Phase noise: -102dBc/Hz@10KHz Operating temperature: -40°C--+85°C

Size: 19.0x19.0x6mm Package type: SMD

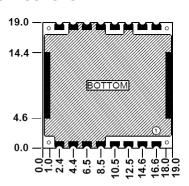
Typical Applications

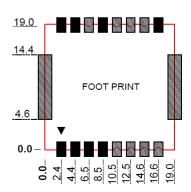
SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

Mechanical Drawing & Pin Connections









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



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Specifications

| Parameter | | Units | Min. | Typical | Max. |
|--------------------------------|----------------|----------|---------|---------|------|
| Operating Frequency Range | | MHz | 2173.50 | | 2205 |
| Output Power | | dBm | +1.0 | +3.0 | +5.0 |
| Step Size | | KHz | | 250 | |
| Settling Time | | msec | | 10 | 30 |
| Output Impedance | | Ω | | 50 | |
| Phase Noise | @1kHz offset | dBc / Hz | | -92 | -87 |
| Phase Noise | @10kHz offset | dBc / Hz | | -102 | -97 |
| Phase Noise | @100kHz offset | dBc / Hz | | -118 | -113 |
| Phase Noise | @1MHz offset | dBc / Hz | | -146 | -141 |
| 2nd Harmonic Suppression | | dBc | | -40 | -20 |
| Sideband Spurious Suppression | | dBc | | | -70 |
| Reference (input frequency) | | MHz | 10 | | 250 |
| Reference (input level) | | dBm | -5 | | +5 |
| VCO Power Supply (Vcc) Voltage | | Vdc | | 5 | |
| VCO Power Supply (Vcc) Current | | mA | | 36 | 40 |
| PLL Power Supply (Vcp) Voltage | | Vdc | | 5 | |
| PLL Power Supply (Vcp) Current | | mA | | 10 | 15 |
| Operating Temperature Range | | °C | -40 | | +85 |