

Dynamic Engineers Inc.

Website: www.DynamicEngineers.com Email: Inquiry@DynamicEngineers.com PLL1919BQ-FS-2302MHz-2596MHz-A 2302-2596MHz SMD Phase Locked Loop (PLL) Synthesizer

Features and Benefits

Frequency Range: 2302-2596MHz

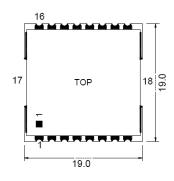
Supply Voltage: 5.0V Current: 40mA Max. 3 wire serial Fractional PLL Output power: +2.0dBm Max. Phase noise: -92dBc/Hz@10KHz Operating temperature: -40°C--+85°C

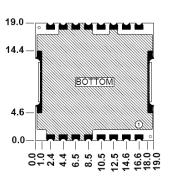
Size: 19.0x19.0x5.8mm Package type: SMD

Typical Applications

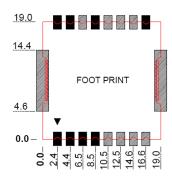
SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

Mechanical Drawing & Pin Connections









Drawing No:

MD240072-1

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 | 2302 | | 2596 |
| Output Power | | dBm | -2.0 | 0.0 | +2.0 |
| Step Size | | KHz | | 250 | |
| Settling Time | | msec | | 30 | |
| Output Impedance | | Ω | | 50 | |
| Phase Noise | @1kHz offset | dBc / Hz | | -88 | -83 |
| Phase Noise | @10kHz offset | dBc / Hz | | -92 | -87 |
| Phase Noise | @100kHz offset | dBc / Hz | | -108 | -103 |
| Phase Noise | @1MHz offset | dBc / Hz | | -122 | -117 |
| 2nd Harmonic Suppression | | dBc | | -25 | -20 |
| Sideband Spurious Suppression | | dBc | | | -70 |
| Reference (input frequency) | | MHz | 10 | | 250 |
| Reference (input level) | | dBm | -5 | | +5 |
| VCO Power Supply (Vcc) Voltage | | Vdc | | 5.0 | |
| VCO Power Supply (Vcc) Current | | mA | | 31 | 40 |
| PLL Power Supply (Vcp) Voltage | | Vdc | | 5.0 | |
| PLL Power Supply (Vcp) Current | | mA | | 10 | 15 |
| Operating Temperature Range | | °C | -40 | | +85 |