

Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com PLL1919BQ-SS-738.5MHz-748.5MHz-A 738.5-748.5MHz SMD PLL Synthesizer

Features and Benefits

Frequency Range: 738.5-748.5MHz

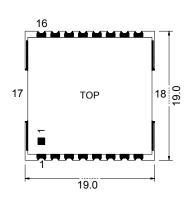
Supply Voltage: 5.0V
Current: 25mA Max.
3 wire serial integer PLL
Output power: +4.0dBm Max.
Phase noise: -110dBc/Hz@10KHz
Operating temperature: -40°C--+85°C

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

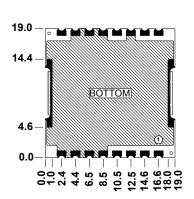
Typical Applications

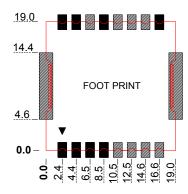
Base station
Cable TV
Satellite Communications
UHF radio link

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

| Parar | neter | Units | Min. | Typical | Max. |
|--------------------------------|----------------|----------|-------|---------|-------|
| Operating Frequency Range | | MHz | 738.5 | | 748.5 |
| Output Power | | dBm | 0.0 | +2.0 | +4.0 |
| Step Size | | KHz | | 250 | |
| Settling Time | | msec | | 10 | 30 |
| Output Impedance | | Ω | | 50 | |
| Phase Noise | @1kHz offset | dBc / Hz | | -83 | -78 |
| Phase Noise | @10kHz offset | dBc / Hz | | -110 | -105 |
| Phase Noise | @100kHz offset | dBc / Hz | | -132 | -127 |
| Phase Noise | @1MHz offset | dBc / Hz | | -153 | -148 |
| 2nd Harmonic Suppression | | dBc | | -28 | -20 |
| Sideband Spurious Suppression | | dBc | | | -80 |
| 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 | | 14 | 25 |
| PLL Power Supply (Vcp) Voltage | | Vdc | | 5 | |
| PLL Power Supply (Vcp) Current | | mA | | 5 | 10 |
| Operating Temperature Range | | °C | -40 | | +85 |