

## Dynamic Engineers Inc.

Website: <a href="www.DynamicEngineers.com">www.DynamicEngineers.com</a> Email: <a href="mailto:lnguiry@DynamicEngineers.com">lnguiry@DynamicEngineers.com</a>

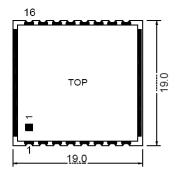
## **Features and Benefits**

Frequency Range: 2260-2280MHz Supply Voltage: 5.0V Current: 40mA Max. 3 wire serial Fractional PLL Output power: +2.0dBm Max. Phase noise: -111dBc/Hz@10KHz Operating temperature: -40°C--+85°C Size: 19.0x19.0x6mm Package type: SMD

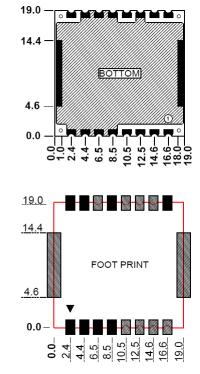
### **Typical Applications**

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

## **Mechanical Drawing & Pin Connections**







PLL1919BQ-LN1-2260MHz-2280MHz-A 2260-2280MHz 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.



# Dynamic Engineers Inc.

Website: <u>www.DynamicEngineers.com</u> Email: <u>Inquiry@DynamicEngineers.com</u> PLL1919BQ-LN1-2260MHz-2280MHz-A 2260-2280MHz SMD Phase Locked Loop (PLL) Synthesizer

## **Specifications**

| Parameter                      |                | Units    | Min. | Typical | Max. |
|--------------------------------|----------------|----------|------|---------|------|
| Operating Frequency Range      |                | MHz      | 2260 |         | 2280 |
| Output Power                   |                | dBm      | -2.0 | 0.0     | +2.0 |
| Step Size                      |                | KHz      |      | 100     |      |
| Settling Time                  |                | msec     |      | 10      | 30   |
| Output Impedance               |                | Ω        |      | 50      |      |
| Phase Noise                    | @1kHz offset   | dBc / Hz |      | -75     | -70  |
| Phase Noise                    | @10kHz offset  | dBc / Hz |      | -111    | -106 |
| Phase Noise                    | @100kHz offset | dBc / Hz |      | -132    | -127 |
| Phase Noise                    | @1MHz offset   | dBc / Hz |      | -154    | -149 |
| 2nd Harmonic Suppression       |                | dBc      |      | -14     | -10  |
| 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       |      | 29      | 40   |
| PLL Power Supply (Vcp) Voltage |                | Vdc      |      | 5       |      |
| PLL Power Supply (Vcp) Current |                | mA       |      | 5       | 10   |
| Operating Temperature Range    |                | С°       | -40  |         | +85  |

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.