



Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
 TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

Dynamic Engineers Inc. - PLL Synthesizer

1690-1720MHz SMD PLL Synthesizer

Features and Benefits

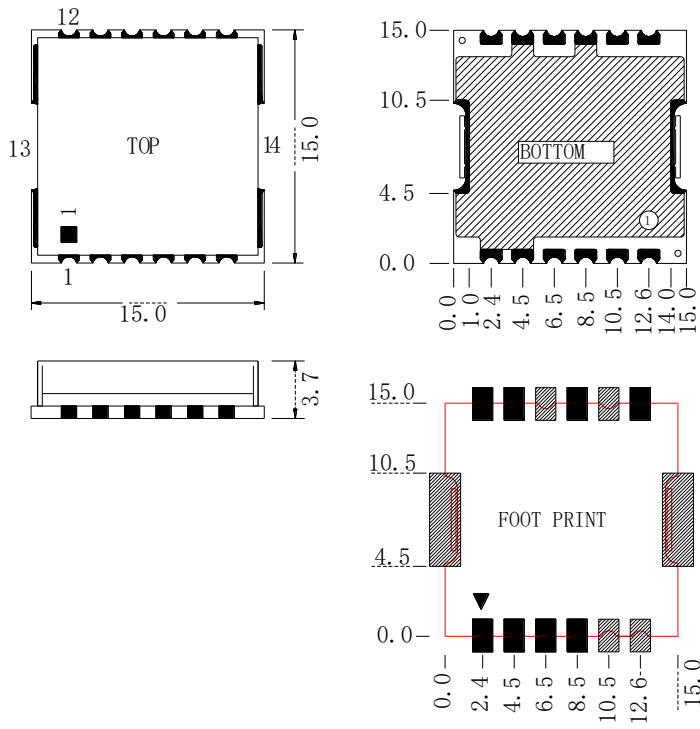
- Frequency Range: 1690-1720MHz
- Supply Voltage: 5.0V
- Current: 30mA Max.
- 3 wire serial Fractional PLL
- Output power: +6.0dBm Max.
- Phase noise: -102dBc/Hz@10KHz
- Operating temperature: -40°C--+85°C
- Size: 15x15x3.7mm
- Package type: SMD

Typical Applications

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

Mechanical Drawing & Pin Connections

Drawing No: MD2400*) -1



Pin Connections:

| Pin | Function |
|-------|-------------|
| 1 | CLK |
| 2 | DATA |
| 3 | LE |
| 4 | Ref. IN |
| 5&6 | GND |
| 7 | VCC(VCO) |
| 8 | GND |
| 9 | RF Out |
| 10 | GND |
| 11 | Lock Detect |
| 12 | Vcp(PLL) |
| 13&14 | 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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Fî J€Fî G€MHz SMD PLL Synthesizer

Specifications

| Parameter | Units | Min. | Typical | Max. |
|--------------------------------|----------|------|---------|------|
| Operating Frequency Range | MHz | 1690 | | 1720 |
| Output Power | dBm | +2.0 | +4.0 | +6.0 |
| Step Size | KHz | | 50 | |
| Settling Time | msec | | 10 | 30 |
| Output Impedance | Ω | | 50 | |
| Phase Noise @1kHz offset | dBc / Hz | | -65 | -60 |
| Phase Noise @10kHz offset | dBc / Hz | | -102 | -97 |
| Phase Noise @100kHz offset | dBc / Hz | | -122 | -117 |
| Phase Noise @1MHz offset | dBc / Hz | | -143 | -138 |
| 2nd Harmonic Suppression | dBc | | -23 | -15 |
| Sideband Spurious Suppression | dBc | | | -70 |
| 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 | | 20 | 30 |
| PLL Power Supply (Vcp) Voltage | Vdc | | 5 | |
| PLL Power Supply (Vcp) Current | mA | | 5 | 10 |
| Operating Temperature Range | °C | -40 | | +85 |