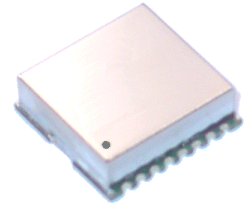


## Features

- +3 dBm Output Level at 1800 MHz
- Channel Step Size : 1000 kHz
- 2<sup>nd</sup> Harmonic : < -25 dBc
- Spurious Level : < -70 dBc
- Lock Time : < 10 ms
- 25 mA Current Consumption
- Strip-line Resonator

## Description

The plerow™ PLL synthesizer module was designed for use in wireless and wireline systems in a wide range of frequency from 50 MHz to 6 GHz. ASB's PLL provides exceptionally low spurious and phase noise performance with fast locking time and low current consumption. All products are available in a surface-mount type package.



## Specifications

| Parameter                 | Unit   | Min.                  | Typical | Max. |
|---------------------------|--------|-----------------------|---------|------|
| Frequency Range           | MHz    | 1750                  | 1800    | 1850 |
| Output Power              | dBm    | 1                     | 3       | 5    |
| Supply Voltage            | V      | 4.7                   | 5       | 5.3  |
| Current Consumption       | mA     |                       | 25      | 35   |
| Channel Step Size         | kHz    |                       | 1000    |      |
| 2 <sup>nd</sup> Harmonics | dBc    |                       | -25     | -20  |
| Spurious Level            | dBc    |                       | -70     | -65  |
| Lock Time                 | ms     |                       | 3       | 10   |
| Reference Frequency       | MHz    |                       | 10      |      |
| Reference Input Level     | dBm    | -5                    | 2       | 7    |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   |        |                       | -75     | -68  |
| @ 10 kHz                  | dBc/Hz |                       | -102    | -95  |
| @ 100 kHz                 |        |                       | -118    | -115 |
| Output Impedance          | Ω      |                       | 50      |      |
| Operating Temp. Range     | °C     | -40                   | 25      | 85   |
| Package Type & Size       | mm     | SMT, 19.0W×19.0L×5.8H |         |      |

1) Measurement conditions are as follows: T = 25°C, V<sub>CC</sub> = 3.3 V, Freq. = 2450 MHz, 50 ohm system.

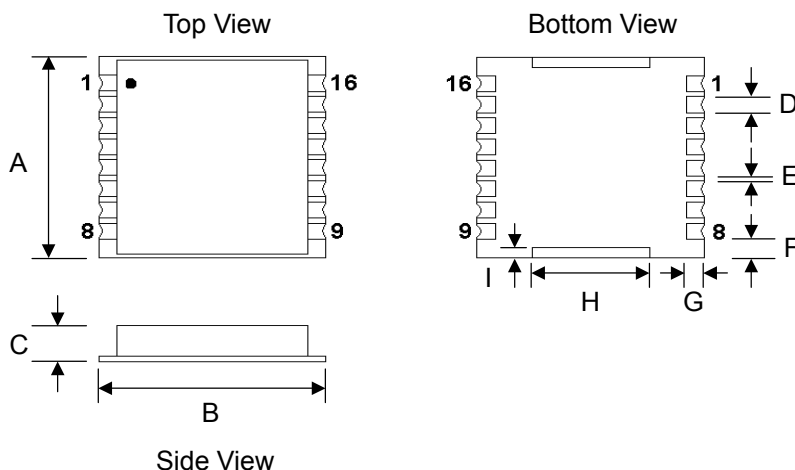
## More Information

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## Outline Drawing



| Pin Configuration |             |
|-------------------|-------------|
| 1                 | CLOCK       |
| 2                 | DATA        |
| 3                 | ENABLE      |
| 4                 | OSC IN      |
| 9                 | VCC (VCO)   |
| 13                | RF OUT      |
| 15                | VCP (PLL)   |
| 16                | LOCK DETECT |
| Others            | Ground      |

| Dimension (mm) |      |
|----------------|------|
| A              | 19.0 |
| B              | 19.0 |
| C              | 5.8  |
| D              | 1.5  |
| E              | 0.5  |
| F              | 1.75 |
| G              | 1.35 |
| H              | 15.0 |
| I              | 0.9  |

Tolerance: ± 0.2