

### Features

- +3 dBm Output Level at 1400 MHz
- Channel Step Size : 200kHz
- 2<sup>nd</sup> Harmonic : < - 20dBc
- Spurious Level : < - 70dBc
- Lock Time : < 10ms
- 30 mA Current Consumption

### 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    | 1350                  | 1400    | 1450 |
| Output Power              | dBm    | 1                     | 3       | 5    |
| Supply Voltage            | V      | 4.7                   | 5.0     | 5.3  |
| Current Consumption       | mA     |                       | 30      |      |
| Channel Step Size         | kHz    |                       | 200     |      |
| 2 <sup>nd</sup> Harmonics | dBc    |                       | -25     | -20  |
| Spurious Level            | dBc    |                       | -75     | -70  |
| Lock Time                 | ms     |                       | 3       | 10   |
| Reference Frequency       | MHz    |                       | 10      |      |
| Reference Input Level     | dBm    | -5                    | 0       | 5    |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   |        |                       | -78     | -74  |
| @ 10 kHz                  | dBc/Hz |                       | -104    | -100 |
| @ 100 kHz / 1MHz          |        |                       | -120    | -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> = 5 V, Freq. = 1400 MHz, 50 ohm system.

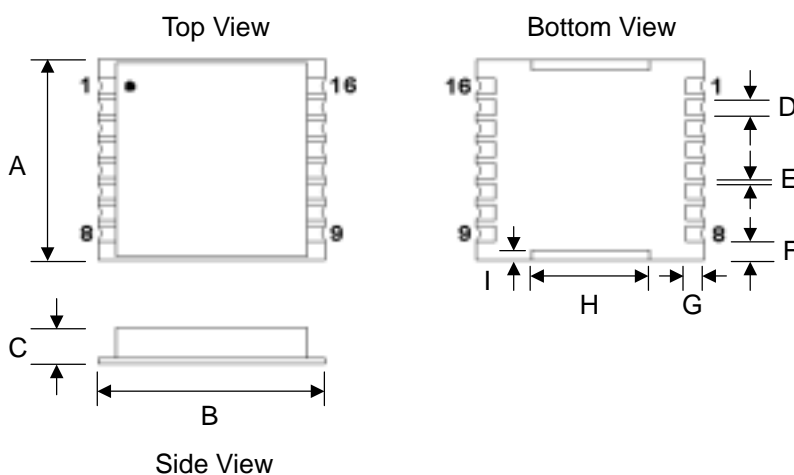
### More Information

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### Outline Drawing



| Pin Configuration |             | Dimension (mm)   |      |
|-------------------|-------------|------------------|------|
| 1                 | CLOCK       | A                | 19.0 |
| 2                 | DATA        | B                | 19.0 |
| 3                 | ENABLE      | C                | 5.8  |
| 4                 | OSC IN      | D                | 1.5  |
| 9                 | VCC (VCO)   | E                | 0.5  |
| 13                | RF OUT      | F                | 1.75 |
| 15                | VCP (PLL)   | G                | 1.35 |
| 16                | LOCK DETECT | H                | 15.0 |
| Others            | Ground      | I                | 0.9  |
|                   |             | Tolerance: ± 0.2 |      |