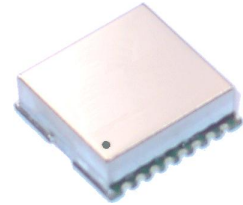


## Features

- 4 dBm Output Level at 823.64 MHz
- Channel Step Size : 100 kHz
- 2<sup>nd</sup> Harmonic : < -25 dBc
- Spurious Level : < -70 dBc
- Lock Time : < 10 ms
- 25 mA Current Consumption
- Stripline Resonator & ROM inside

## 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    |                       | 823.64  |      |
| Output Power              | dBm    | 2                     | 4       | 6    |
| Supply Voltage            | V      | 4.7                   | 5.0     | 5.3  |
| Current Consumption       | mA     |                       | 25      | 35   |
| Channel Step Size         | kHz    |                       | 100     |      |
| 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                   | dBc/Hz |                       | -78     | -70  |
| @ 10 kHz                  |        |                       | -106    | -100 |
| @ 100 kHz                 |        |                       | -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> = 3.3 V, Freq. = 2450 MHz, 50 ohm system.

## More Information

Website: [www.asb.co.kr](http://www.asb.co.kr)  
E-mail: [sales@asb.co.kr](mailto:sales@asb.co.kr)

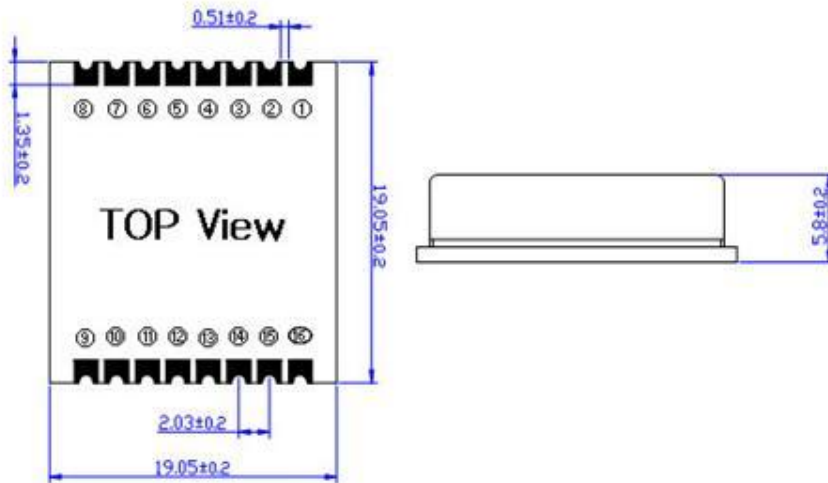
Tel: (82) 42-528-7220  
Fax: (82) 42-528-7222

ASB Inc., 4th Fl. Venture Town  
Bldg., 367-17 Goijeong-Dong,  
Seo-Gu, Daejeon 302-716, Korea

**Outline Drawing**

**APL0000 Type**

| Type                    | Dimension     |
|-------------------------|---------------|
| Standard (PLL IC + VCO) | 19 x 19 x 5.8 |



| Pin Out for PLL             |             |         |             |
|-----------------------------|-------------|---------|-------------|
| Pin No.                     | Application | Pin No. | Application |
| 1                           | CLOCK       | 9       | VCC (VCO)   |
| 2                           | DATA        | 13      | RF OUT      |
| 3                           | ENABLE      | 15      | VCC (PLL)   |
| 4                           | OSC IN      | 16      | LOCK DETECT |
| All other Pins are Grounded |             |         |             |

