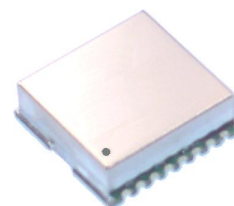


## Features

- 4 dBm Output Level at 1000 MHz
- 2<sup>nd</sup> Harmonic: < -20 dBc
- Spurious Level: < -67 dBc
- Current Consumption: < 40 mA

## 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    |                       | 1000    |      |
| Output Power              | dBm    | 2                     | 4       | 6    |
| Supply Voltage            | V      | 4.8                   | 5       | 5.2  |
| Current Consumption       | mA     |                       | 27      | 40   |
| 2 <sup>nd</sup> Harmonics | dBc    |                       | -25     | -20  |
| Spurious Level            | dBc    |                       | -72     | -67  |
| Reference Frequency       | MHz    |                       | 10      |      |
| Reference Input Level     | dBm    | 2                     | 4       |      |
| Phase Noise (C / N)       |        | 0                     | 2       | 5    |
| @ 1 kHz                   |        |                       | -80     | -75  |
| @ 10 kHz                  | dBc/Hz |                       | -104    | -99  |
| @ 100 kHz                 |        |                       | -120    | -115 |
| Output Impedance          | Ω      |                       | 50      |      |
| Operating Temp. Range     | °C     | -30                   | 25      | 80   |
| 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. = 1000 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

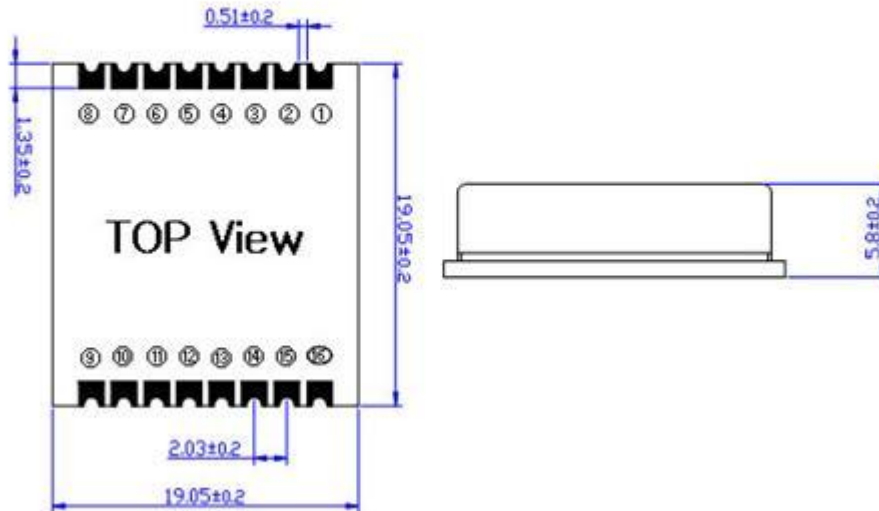
ASB Inc., 4th Fl. Venture Town  
Bldg., 367-17 Goijeong-Dong,  
Seo-Gu, Daejeon 302-716,

Korea

Outline Drawing

APL0000-R Type

| Type               | Dimension     |
|--------------------|---------------|
| PLL IC + VCO + ROM | 19 x 19 x 5.8 |



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

