

## Features

- 3 dBm Output Level at 1950 MHz
- 2<sup>nd</sup> Harmonic : < -20 dBc
- Spurious Level : < -70 dBc
- Lock Time : < 30 ms
- 40 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    | 1935                  | 1950    | 1965 |
| Output Power              | dBm    | 1                     | 3       | 5    |
| Supply Voltage            | V      | 4.75                  | 5       | 5.25 |
| Current Consumption       | mA     |                       |         | 40   |
| Channel Step Size         | kHz    |                       | 10      |      |
| 2 <sup>nd</sup> Harmonics | dBc    |                       |         | -20  |
| Spurious Level            | dBc    |                       |         | -70  |
| Lock Time                 | ms     |                       |         | 30   |
| Reference Frequency       | MHz    |                       | 13      |      |
| Reference Input Level     | dBm    |                       |         |      |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   |        |                       | -73     |      |
| @ 10 kHz                  | dBc/Hz |                       | -100    |      |
| @ 100 kHz                 |        |                       | -118    |      |
| 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. = 1950 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)

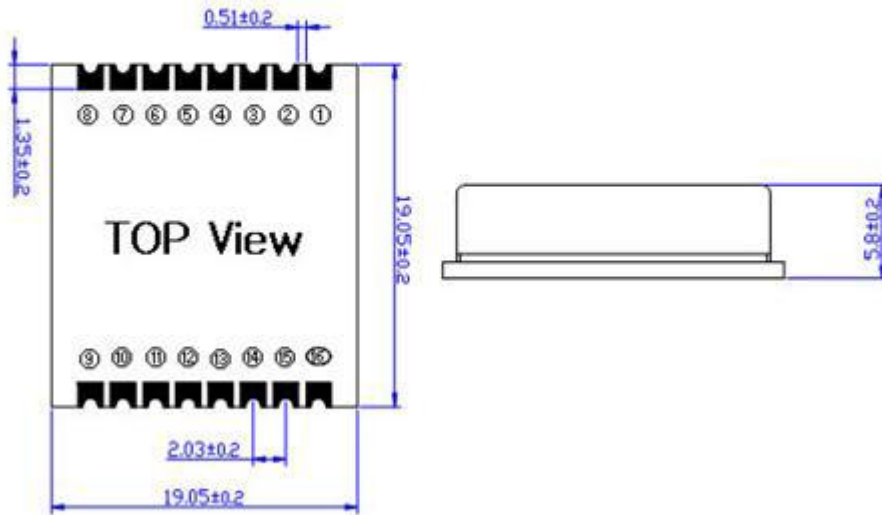
Tel: (82) 42-528-7220  
Fax: (82) 42-528-7222

ASB, Inc., 4<sup>th</sup> Fl. Venture Town  
Bldg, KT HRDC, 367-17 Goi-  
jeong-Dong, Seo-Gu, Daejeon,  
302-716, Korea

**Outline Drawing**

**APL0000-T Type**

| Type                | Dimension     |
|---------------------|---------------|
| PLL IC + VCO + TCXO | 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   | GROUND      | 16      | LOCK DETECT |
| All other Pins are Grounded / Internal TCXO |             |         |             |

