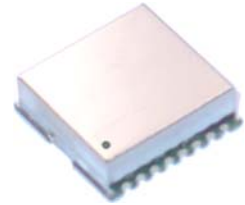


## Features

- +5 dBm Output Level at 811 MHz
- Channel Step Size : 20 kHz
- 2<sup>nd</sup> Harmonic : < -25 dBc
- Spurious Level : < -70 dBc
- Lock Time : < 10 ms
- 19 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    | 806.5                 | 811     | 815.5 |
| Output Power              | dBm    | 4                     | 5       | 6     |
| Supply Voltage            | V      | 4.7                   | 5.0     | 5.3   |
| Current Consumption       | mA     |                       | 19      | 30    |
| Channel Step Size         | kHz    |                       | 20      |       |
| 2 <sup>nd</sup> Harmonics | dBc    |                       | -35     | -25   |
| Spurious Level            | dBc    |                       | -78     | -70   |
| Lock Time                 | ms     |                       | 3       | 10    |
| Reference Frequency       | MHz    |                       | 10      |       |
| Reference Input Level     | dBm    | -5                    | 0       | 5     |
| Phase Noise (C / N)       |        |                       |         |       |
| @ 10 kHz                  | dBc/Hz | -111                  | -108    | -105  |
| @ 100 kHz                 | dBc/Hz | -124                  | -121    | -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. = 811 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)

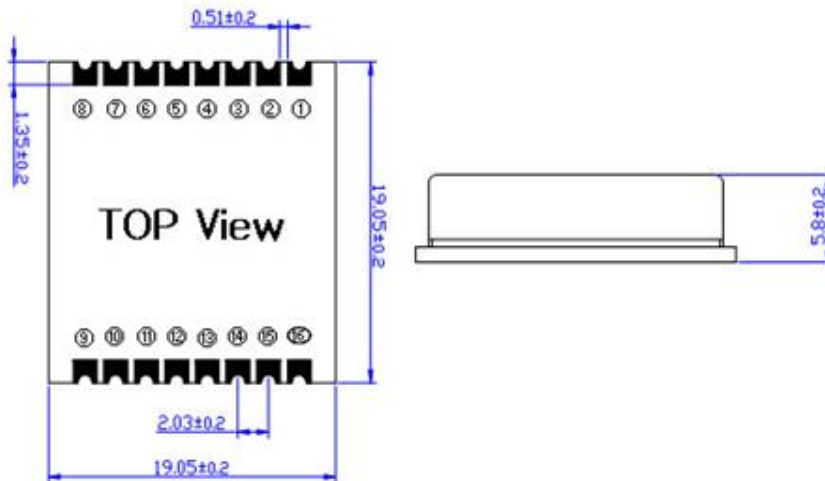
Tel: (82) 42-528-7220  
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 Bldg, KT HRDC, 367-17 Goi-  
 jeong-Dong, Seo-Gu, Daejeon,  
 302-716, Korea

## 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 |             |         |             |

