

## Features

- 3 dBm Output Level at 2150MHz
- Channel Step Size : 1000 kHz
- 2<sup>nd</sup> Harmonic : < -20 dBc
- Spurious Level : < -65 dBc
- 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    |                       | 2150    |      |
| Output Power              | dBm    | 1                     | 3       | 5    |
| Supply Voltage            | V      | 4.7                   | 5       | 5.3  |
| Current Consumption       | mA     |                       | 30      | 40   |
| Channel Step Size         | kHz    |                       | 1000    |      |
| 2 <sup>nd</sup> Harmonics | dBc    |                       | -25     | -20  |
| Spurious Level            | dBc    |                       |         | -65  |
| Lock Time                 | ms     |                       | 3       | 10   |
| Reference Frequency       | MHz    |                       | 13      |      |
| Reference Input Level     | dBm    |                       |         |      |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   |        |                       | -70     | -65  |
| @ 10 kHz                  | dBc/Hz |                       | -100    | -95  |
| @ 100 kHz                 |        |                       | -120    | -115 |
| Output Impedance          | Ω      |                       | 50      |      |
| Operating Temp. Range     | °C     | -40                   | 25      | 80   |
| Package Type & Size       | mm     | SMT, 15.0W×15.0L×3.5H |         |      |

1) Measurement conditions are as follows: T = 25°C, V<sub>CC</sub> = 5 V, Freq. = 2150 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)

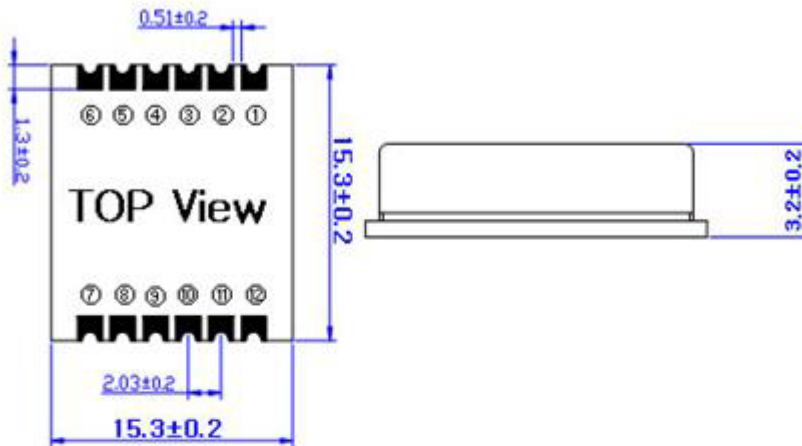
Tel: (82) 42-528-7223  
Fax: (82) 42-528-7222

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

Outline Drawing

APLT0000-R/T Type

| Type                      | Dimension         |
|---------------------------|-------------------|
| PLL IC + VCO + ROM + TCXO | 15.3 x 15.3 x 3.2 |



| Pin Out for PLL                                     |             |         |             |
|---|-------------|---------|-------------|
| Pin No.   | Application | Pin No. | Application |
| 1   | GROUND      | 7       | VCC (VCO)   |
| 2   | GROUND      | 10      | RF OUT      |
| 3   | GROUND      | 11      | VCC (PLL)   |
| 4   | GROUND      | 12      | LOCK DETECT |
| All other Pins are Grounded / Internal TCXO and ROM |             |         |             |

