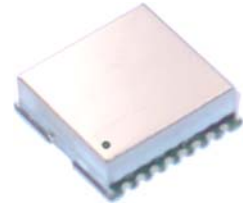


## Features

- +5 dBm Output Level at 1690 MHz
- Channel Step Size : 1000 kHz
- 2<sup>nd</sup> Harmonic : < -20 dBc
- Spurious Level : < -65 dBc
- Lock Time : < 10 ms
- 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    |                       | 1690    |      |
| Output Power              | dBm    | 3                     | 5       | 7    |
| Supply Voltage            | V      | 4.7                   | 5.0     | 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     |                       |         | 10   |
| Reference Frequency       | MHz    |                       | 13      |      |
| Reference Input Level     | dBm    |                       | -       |      |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   | dBc/Hz |                       | -75     | -65  |
| @ 10 kHz                  | dBc/Hz |                       | -105    | -95  |
| @ 100 kHz                 | dBc/Hz |                       | -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> = 5 V, Freq. = 1090 MHz, 50 ohm system.

2) Frequency Stability of internal ref. TCXO is +/-2.5 ppm (max) over the operating temperature range.

## More Information

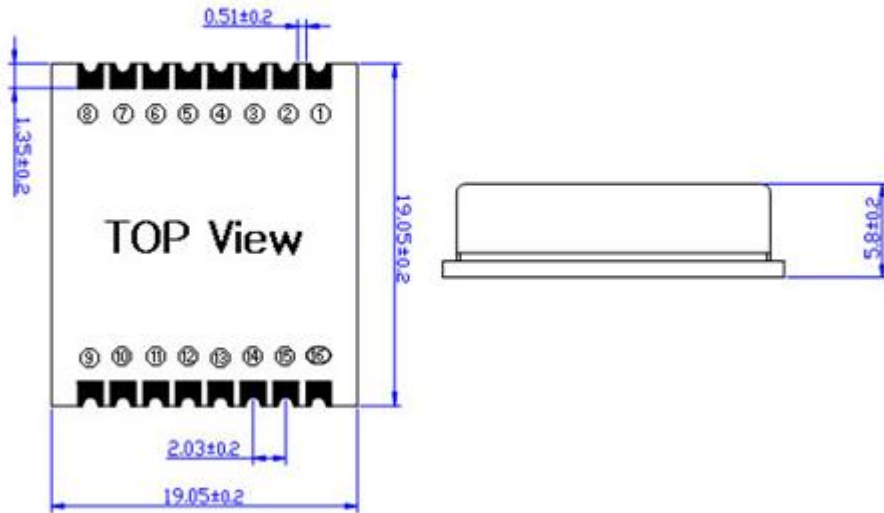
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302-716, Korea

### Outline Drawing

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

