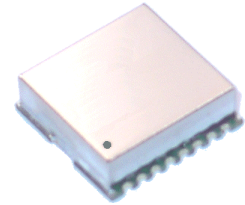


### Features

- 3 dBm Output Level at 1835 MHz
- Channel Step Size : 100 kHz
- 2<sup>nd</sup> Harmonic : < -20 dBc
- Spurious Level : < -65 dBc
- Lock Time : < 10 ms
- Current Consumption : < 35 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    | 1805                  |         | 1865 |
| Output Power              | dBm    | 1                     | 3       | 5    |
| Supply Voltage            | V      | 4.75                  | 5       | 5.25 |
| Current Consumption       | mA     |                       |         | 35   |
| Channel Step Size         | kHz    |                       | 100     |      |
| 2 <sup>nd</sup> Harmonics | dBc    |                       |         | -20  |
| Spurious Level            | dBc    |                       |         | -65  |
| Lock Time                 | ms     |                       | 3       | 10   |
| Reference Frequency       | MHz    |                       | 10      |      |
| Reference Input Level     | dBm    |                       | 0       |      |
| Phase Noise (C / N)       |        |                       |         |      |
| @ 1 kHz                   | dBc/Hz |                       | -72     | -65  |
| @ 10 kHz                  |        |                       | -101    | -97  |
| @ 100 kHz                 |        |                       | -120    | -115 |
| Output Impedance          | Ω      |                       | 50      |      |
| Operating Temp. Range     | °C     | -40                   | 25      | 80   |
| Package Type & Size       | mm     | SMT, 19.0W×19.0L×5.8H |         |      |

### More Information

Website: [www.asb.co.kr](http://www.asb.co.kr)  
 E-mail: [sales@asb.co.kr](mailto:sales@asb.co.kr)

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1) Measurement conditions are as follows: T = 25°C, V<sub>CC</sub> = 5 V, Freq. = 1835 MHz, 50 ohm system.

### Outline Drawing



| Dimension (unit : mm) ±0.02 |     |     |      |      |      |      |      |      |       |     |      |      |      |     |
|-----------------------------|-----|-----|------|------|------|------|------|------|-------|-----|------|------|------|-----|
| A                           | B   | C   | D    | E    | F    | G    | H    | I    | J     | K   | L    | M    | N    | O   |
| 19.0 ±0.1                   | 5.5 | 5.8 | 2.03 | 0.51 | 1.35 | 0.45 | 17.0 | 16.3 | 15.75 | 2.0 | 20.6 | 1.52 | 2.03 | 8.0 |

| Pin Description             |             |         |             |
|-----------------------------|-------------|---------|-------------|
| Pin No.                     | Application | Pin No. | Application |
| 1                           | CLOCK       | 9       | VCC(VCO)    |
| 2                           | DATA        | 13      | RF OUT      |
| 3                           | ENABLE      | 15      | VCP(PLL)    |
| 4                           | OSC IN      | 16      | LOCK DETECT |
| All other Pins are Grounded |             |         |             |