Advanced Semiconductor Business Inc.

# Plerow APL1051.54

## PLL Module

## Features

- + 3dBm Output Level at 1051.54 MHz
- Channel Step Size : 100 kHz
- 2nd Harmonic : < - 25dBc
- Spurious Level : < - 70dBc
- Lock Time : < 10 ms
- 30mA 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 | 1041.54 | 1051.54 | 1061.54 |
| Output Power | dBm | 1 | 3 | 5 |
| Supply Voltage | V | 4.7 | 5 | 5.3 |
| Current Consumption | mA | | 30 | |
| Channel Step Size | kHz | | 100 | |
| 2nd Harmonics | dBc | | -25 | |
| Spurious Level | dBc | | -70 | |
| Lock Time | ms | | 3 | 10 |
| Reference Frequency | MHz | | 10 | |
| Reference Input Level | dBm | -5 | 2 | 7 |
| Phase Noise (C / N) | | | | |
| @ 1 kHz | dBc/Hz | | -80 | |
| @ 10 kHz | | | -102 | |
| @ 100 kHz | | | -120 | |
| 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, $V_{CC}$ = 5.0 V, Freq. = 1051.54 MHz, 50 ohm system.

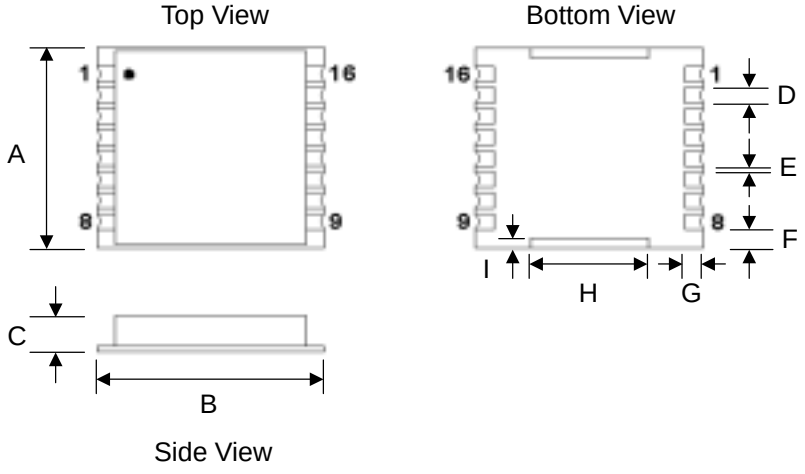

### More Information

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## Outline Drawing




| Pin Configuration | |
|---|---|
| 1 | CLOCK |
| 2 | DATA |
| 3 | ENABLE |
| 4 | OSC IN |
| 9 | VCC (VCO) |
| 13 | RF OUT |
| 15 | VCP (PLL) |
| 16 | LOCK DETECT |
| Others | Ground |

| Dimension (mm) | |
|---|---|
| A | 19.0 |
| B | 19.0 |
| C | 5.8 |
| D | 1.5 |
| E | 0.5 |
| F | 1.75 |
| G | 1.35 |
| H | 15.0 |
| I | 0.9 |
| Tolerance: ± 0.2 | |