plerow^{TM} APL0710- R/T

PLL Synthesizer Module

Features

· 4dBm Output Level at 710 MHz

· 2nd Harmonic: <-20 -dBc

· Spurious Level: < -68dBc

· Current Consumption: < 35mA

Description

The plerow^{TM} 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.
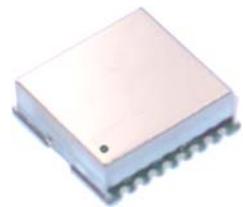
Specifications

Parameter	Unit	Min.	Typical	Max.
Frequency Range	MHz		710	
Output Power	dBm	2	4	6
Supply Voltage	V	4.8	5.0	5.2
Current Consumption	mA		28	35
2nd Harmonics	dBc		-25	-20
Spurious Level	dBc		-72	-68
Reference Frequency	MHz		13	
Reference Input Level	dBm	0	2	5
Phase Noise (C / N)				
@ 1 kHz			-75	-70
@ 10 kHz	dBc/Hz		-105	-100
@ 100 kHz			-120	-115
Output Impedance	Ω		50	
Operating Temp. Range	°C	-30	25	80
Package Type & Size	mm	SMT, 19.0W×19.0L×5.8H		

1) Measurement conditions are as follows: T = 25°C, V_{CC} = 5 V, Freq. = 710MHz, 50 ohm system.

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

Outline Drawing

APL0000-R/T Type

Type	Dimension
PLL IC + VCO + ROM + TCXO	19 x 19 x 5.8
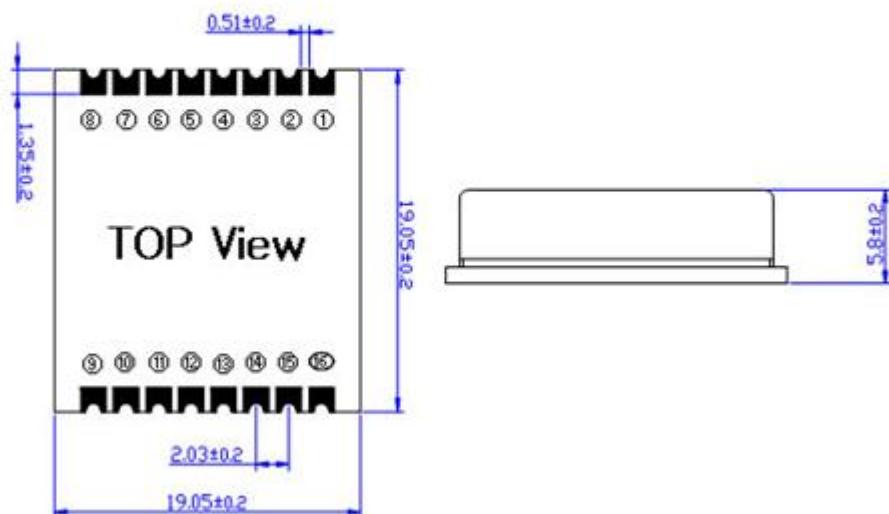
Pin Out for PLL			
Pin No.	Application	Pin No.	Application
1	GROUND	9	VCC (VCO)
2	GROUND	13	RF OUT
3	GROUND	15	VCC (PLL)
4	GROUND	16	LOCK DETECT
All other Pins are Grounded / Internal TCXO and ROM			