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PLL1919BQ-FS-1981.76MHz-2021.76MHz-A

1981.76-2021.76MHz SMD Phase Locked Loop (PLL) Synthesizer

Features and Benefits

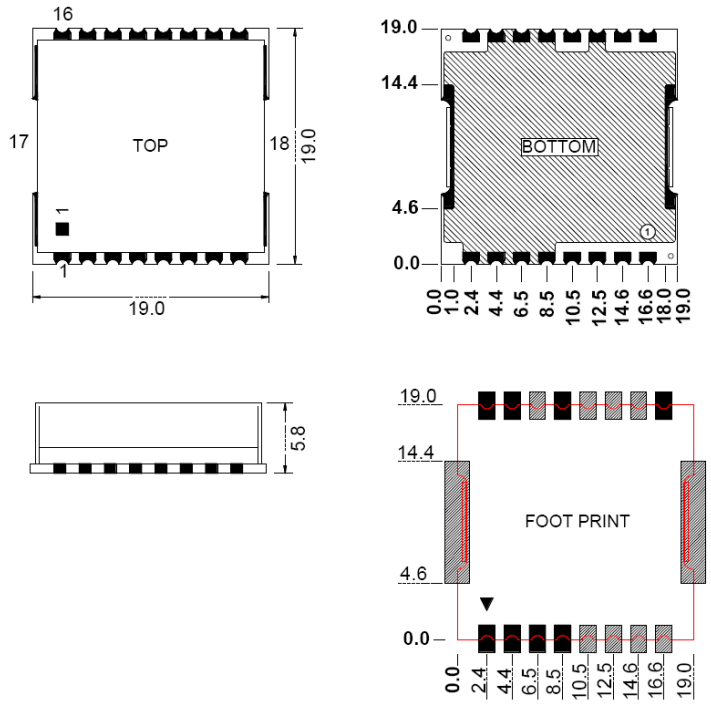
Frequency Range: 1981.76-2021.76MHz
Supply Voltage: 5.0V
Current: 40mA Max.
3 wire serial Fractional PLL
Output power: +2.0dBm Max.
Phase noise: -99dBc/Hz@10KHz
Operating temperature: -40°C--+85°C
Size: 19.0x19.0x5.8mm
Package type: SMD

Typical Applications

SATCOM radio link
Point-to-Point radio
Receiver
MMDS
Test Equipment
WiMAX
Radar

Mechanical Drawing & Pin Connections

Drawing No: MD240072-1



Pin Connections:

Pin	Function
1	CLK
2	DATA
3	LE
4	Ref. IN
5-8	GND
9	VCC(VCO)
10-12	GND
13	RF Out
14	GND
15	Vcp(PLL)
16	Lock Detect
17&18	GND

Unit in mm
1mm = 0.0394 inches

Specifications

Parameter	Units	Min.	Typical	Max.
Operating Frequency Range	MHz	1981.76		2021.76
Output Power	dBm	-2.0	0.0	+2.0
Step Size	KHz		160	
Settling Time	msec		10	30
Output Impedance	Ω		50	
Phase Noise @1kHz offset	dBc / Hz		-92	-87
Phase Noise @10kHz offset	dBc / Hz		-99	-94
Phase Noise @100kHz offset	dBc / Hz		-120	-115
Phase Noise @1MHz offset	dBc / Hz		-140	-135
2nd Harmonic Suppression	dBc		-33	-20
Sideband Spurious Suppression	dBc			-70
Reference (input frequency)	MHz	10		250
Reference (input level)	dBm	-5		+5
VCO Power Supply (Vcc) Voltage	Vdc		5.0	
VCO Power Supply (Vcc) Current	mA		31	40
PLL Power Supply (Vcp) Voltage	Vdc		5.0	
PLL Power Supply (Vcp) Current	mA		10	15
Operating Temperature Range	°C	-40		+85