

DDS-based Microwave Frequency Synthesizer

Available 1-20 GHz (In bands)

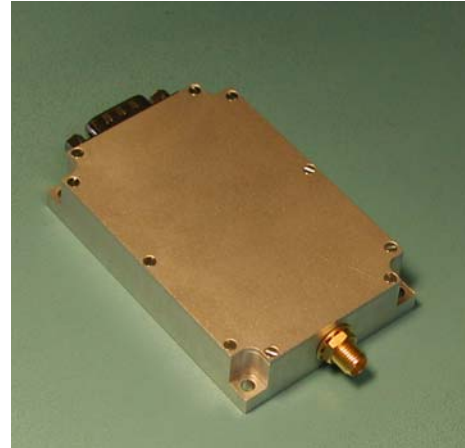
Example 16.8-18.4 GHz

Features

- Low phase noise
- Programmable step size, down to 100 Hz
- Programmable power-up frequency
- Low sensitivity to shock and vibration
- Low power consumption
- Small size
- Custom designs available

Applications

- Digital microwave radio
- Satcom converters
- Test equipment
- Radar



TYPICAL PERFORMANCE SPECIFICATIONS

Output frequency:	16.8-18.4 GHz
Step size:	Programmable. Down to 100 Hz
Output power:	+8 to +17 dBm
Output power variation:	+/- 1.5 dBm
Phase noise:	-85 dBc/Hz@10 KHz, -109 dBc/Hz@100 KHz
Spurious output:	< -70 dBc
Harmonics:	< -30 dBc
Reference frequency:	5 – 100 MHz
Frequency accuracy:	Same as reference
Frequency control:	3-wire serial interface. Re-programmable power-up frequency
DC power consumption:	< 2.5 W
Operating temperature:	-35 °C to + 80 °C
Size:	75 x 50 x 15 mm

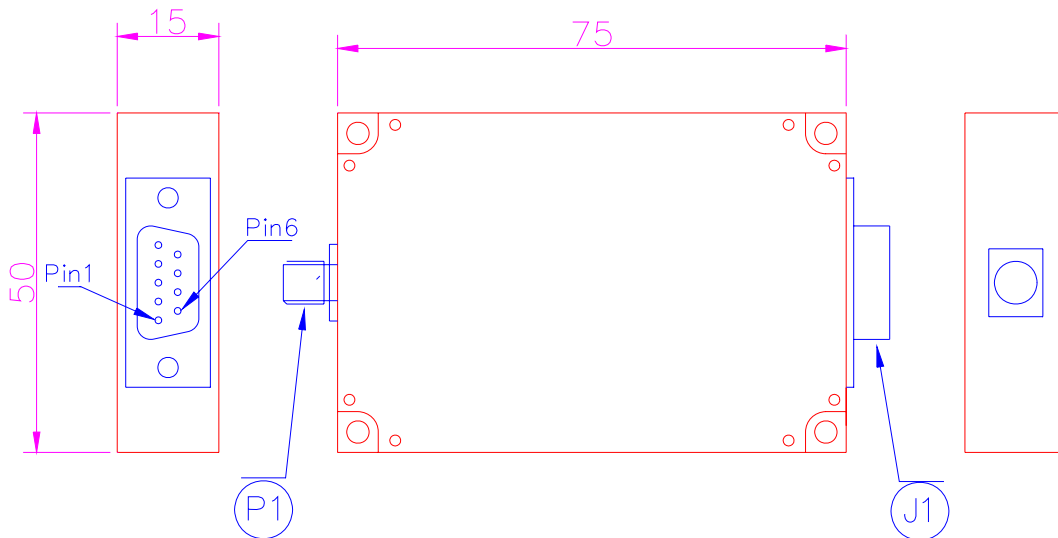
Date Dec18, 2006

DDS-based Microwave Frequency Synthesizer

Available 1-20 GHz (In bands)

Example 16.8-18.4 GHz

Outline drawing:



Connectors marking:

P1: RF Output

J1: DC Supply, Freq. control and alarm

SMA-F

D-Sub 9 pin Male

J1 Connector :

J1 Pinout table:

Pin 1:	Enable
Pin 2:	Data
Pin 3:	Clock
Pin 4:	Lock Detect
Pin 5:	Test
Pin 6:	N/C
Pin 7:	+13.5V
Pin 8:	- 6V
Pin 9:	GND

Date Dec18, 2006