

Synthesizer Features and specifications

Features

- High stability.
- Spurious free.
- Short settling time.
- Single or multi channel operation.
- Built and assembled under MIL standard and ISO9001 standards.
- Can be operated together with VCO, DRO or YIG Oscillator.
- RF components on MIC or with discrete components.

The FSO is an oscillator with very high frequency stability and high spectral purity. It can be used together with VCO, DRO or YIG:s and is characterized by high switching speed. The FSO can be delivered in single or multi channel configuration. Up to four separate oscillators can be used at the same time, independently tuned and selected. The RF circuits can be realized in either MIC technique or with discrete components. Input for reference oscillator and RF connectors are SMA female, control and power supply are of type MDM-37_S, floating.

Technical specification	Parameter	Remarks
Electrical		
Frequency range	2GHz – 18 GHz	
Frequency resolution/step size	20 MHz (10 MHz)	
Output power	-10 to + 10 dBm	
Load VSWR	2,0:1	Max
Phase noise data		
10 Hz-100Hz	-50 dBc/Hz max	
100Hz-1kHz	-60 dBc/Hz max	
1kHz-10kHz	-70 dBc/Hz max	
10kHz-100kHz	-70 dBc/Hz max	
100kHz-1MHz	-80 dBc/Hz max	
>1MHz	-100 dBc/Hz max	
Spurious	-50dBc	
Harmonics	-40dBc	
Isolation	-50 dB	Betw. channels
Settling time in each channel	100 µs	Max
Switching time between channels	30 ns	Max, to reach phase and frequency stability
Mechanical		
Temperature range	-40°C to +90°C	
Storage	-50°C to +90°C	
Warming up time	50 s	Max
Weight	1,5 kg	Max
Power supply		
Supply voltage	+5 VDC / 1,5 A +15VDC /1,5 A +28 VDC / 0,1 A -15 VDC / 0,1 A	
Power consumption	30 W	Max