

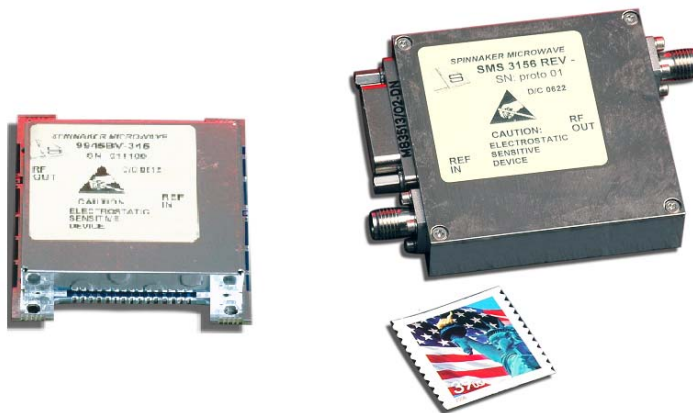
**SMS Series
Single Loop Synthesizer / PLO**

FEATURES

- 100 MHz to 26 GHz Output
- Small Package: 1.9"x1.9"x0.45"
- < 50 uS Tuning Speed Option
- < 60 dBc Spurious
- MIL-STD Screening Available

APPLICATIONS

- EW / SIGINT
- Radar Systems
- Microwave Radio
- Instrumentation / Test Module



DESCRIPTION

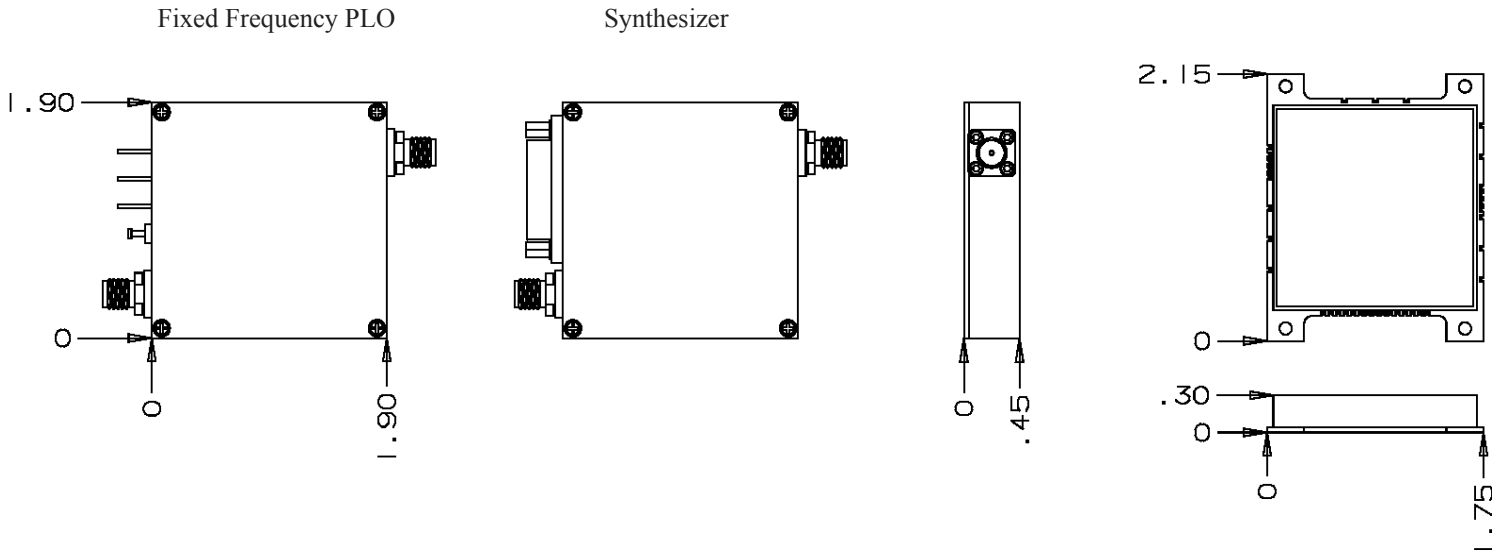
Spinnaker Microwave's SMS series synthesizer offer tremendous bandwidth and frequency capabilities in a rugged, compact housing measuring only 1.9" x 1.9" x 0.45". These units are ideally suited for applications requiring broadband performance and higher frequency outputs (up to 26 GHz). A micro D-25 connector allows user option of parallel, serial, or BCD control. Internal logic automatically adjusts loop filters for optimum gain control and allows programmable frequency resolution or sweep function generation.

PARAMETER	VALUE	OPTIONS
Frequency Range	100 MHz - 26 GHz	Fixed Frequency
Bandwidth	Up to one Octave	Fixed Output
Step Size	200 kHz to 10 MHz	
Tuning Speed	500 uS	< 50 uS
Output Power	+10 dBm	+20 dBm
Harmonics	-15 dBc	-40 dBc
Spurious	-60 dBc	-70 dBc
Phase Noise (dependent on Reference, Step Size, Settling Time)		
@ 10 kHz offset, 10 GHz	-80 dBc/Hz Synthesizer, -100 dBc/Hz as Fixed Output	
Input Reference Frequency	1 - 200 MHz	Up to 2 GHz
Programming	Parallel, Serial, BCD	
Supply Voltage	+15 VDC, 150 mA	+5 VDC only
Operating Temp	-20 to +75 deg C.	-40 to +85 deg C.
Physical	SMA(F) Module, Surf. Mount	Custom

SMS Series Single Loop Synthesizer

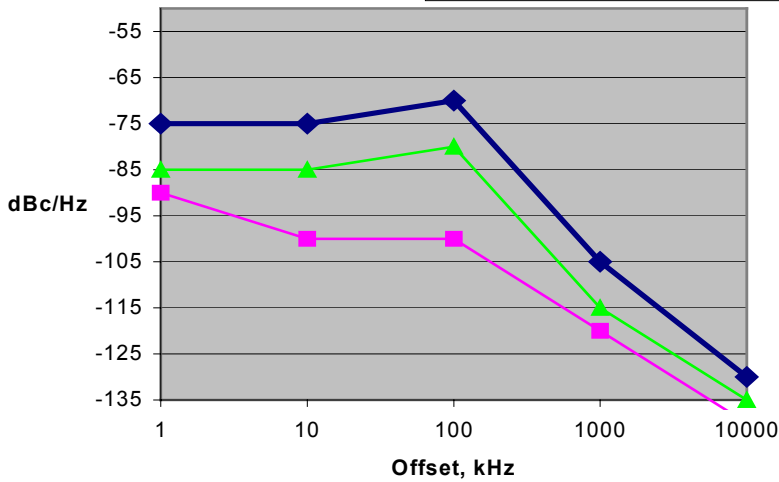
SMA Package (micro-D25 or solder pins):

Surface Mount Package:



Typical Phase Noise,
SMS Series

- ◆ 18 GHz fast tune
- 10 GHz low noise
- ▲ 5 GHz fast tune



Models Available:	Frequency Range:
SMS3060	3.0 - 6.0 GHz
SMS4080	4.0 - 8.0 GHz
SMS5070	5.0 - 7.0 GHz
SMS6090	6.0 - 9.0 GHz
SMS80100	8.0 - 10.0 GHz
SMS80120	8.0 - 12.0 GHz
SMS90130	9.0 - 13.0 GHz
SMS12180	12.0 - 18.0 GHz
SMS18220	18.0 - 22.0 GHz
SMS22240	22.0 - 24.0 GHz
SMS24260	24.0 - 26.0 GHz

Custom frequency ranges available, no additional cost

* Other configurations available, consult factory



Certificate # A2498US