

FREQUENCY SYNTHESIZER

Model 454042

1000 - 1500 MHz

Features

- Low Phase Noise
- Low Spurious Outputs
- High Reliability
- Internal Reference Model

Specifications

CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -10°C to +60 °C	
Frequency (MHz)	1000 - 1500	1000 - 1500	
Output Power (dBm)	+13	0 / +17.0	
Step Size (MHz)	10	—	
Stability (ppm)	±10	—	
Harmonics (dBc)	-20	-15 Max.	
Spurious (dBc)	-80	-80 Max.	
Phase Noise (1000 MHz)	-53 dBc/Hz @ 10 Hz -83 dBc/Hz @100 Hz -90 dBc/Hz @ 1 kHz -93 dBc/Hz @ 10 kHz -130 dBc/Hz @ 100 kHz -145 dBc/Hz @ 1 MHz	—	
Power	Vdc m A	+15 70	+15 90 Max.

NOTE: Care should always be taken to effectively ground the case of each unit.

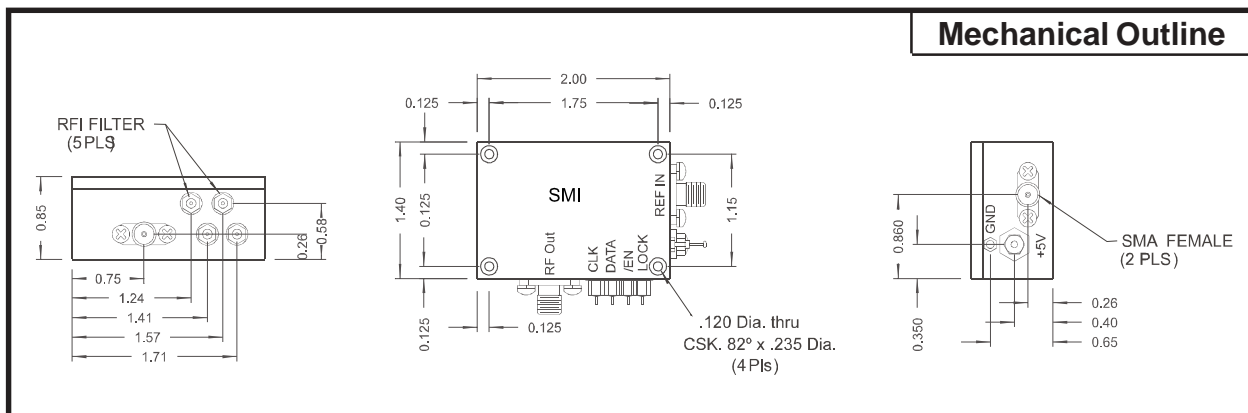
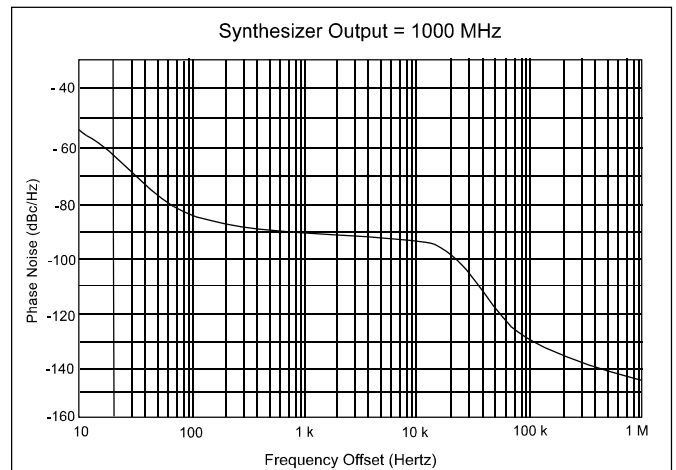
Absolute Maximum Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +24 Volts
 Maximum DC Tuning Voltage +20 Volts
 Minimum DC Tuning Voltage 0 Volts

Spectrum Microwave can design a synthesizer to meet your requirements, from low-cost surface mount commercial units to complex multiple conversion designs for military and space applications.

We have delivered units with step sizes from 0.002 Hz to 200 MHz, 5-microsecond switching speeds, automatically switched back-up references, direct digital synthesis, and many other special features.

Typical Performance Data



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532

Rev. 11/7/08

www.SpectrumMicrowave.com · Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001