

# FREQUENCY SYNTHESIZER

441052

800 - 900 MHz

## Features

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

## Specifications

| CHARACTERISTIC        | TYPICAL<br>Ta = +25 °C                                                                                                                 | MIN/MAX<br>Ta = -10°C to +60 °C |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Frequency (MHz)       | 800 - 900                                                                                                                              | 800 - 900                       |
| Output Power (dBm)    | +13                                                                                                                                    | 0 / +17.0                       |
| Step Size             | 1 MHz                                                                                                                                  | 1 Hz / 10 MHz                   |
| Reference (MHz)       | 10                                                                                                                                     | 1 - 200                         |
| Harmonics (dBc)       | -25                                                                                                                                    | -20 Max.                        |
| Spurious (dBc)        | -70                                                                                                                                    | —                               |
| Phase Noise (800 MHz) | -73 dBc/Hz @ 10 Hz<br>-78 dBc/Hz @ 100 Hz<br>-81 dBc/Hz @ 1 kHz<br>-82 dBc/Hz @ 10 kHz<br>-111 dBc/Hz @ 100 kHz<br>-130 dBc/Hz @ 1 MHz | —                               |
| Power                 | Vdc<br>mA                                                                                                                              | +15<br>150                      |

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

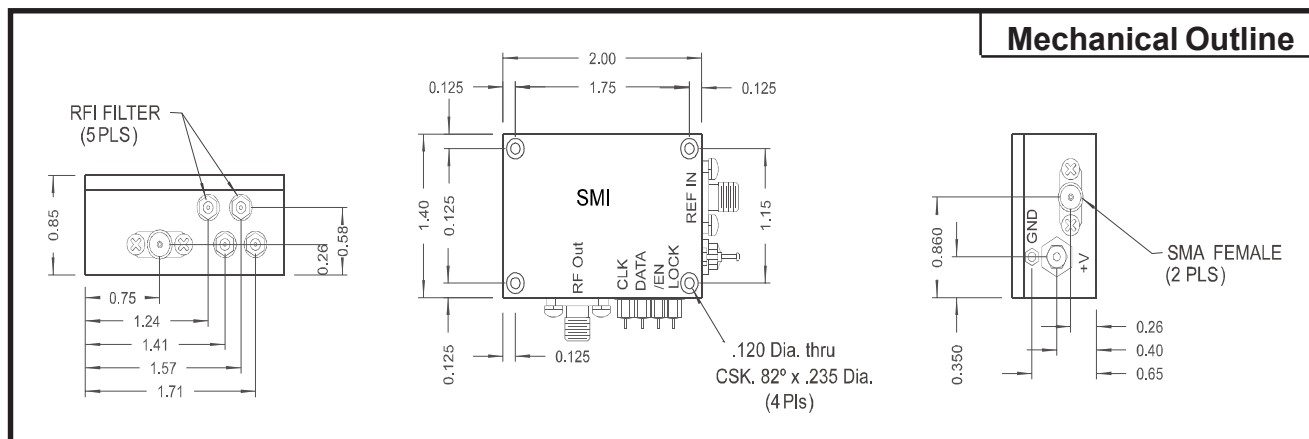
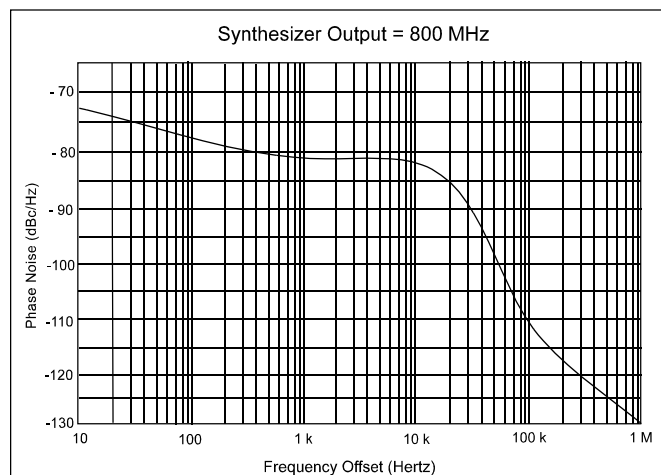
## Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +24 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



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