

FREQUENCY SYNTHESIZER

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	1 / 100
Stability (ppm)	±10	—
Harmonics (dBc)	-25	-20 Max.
Spurious (dBc)	-70	—
Phase Noise (1000 MHz)	-53 dBc/Hz @ 10 Hz -83 dBc/Hz @ 100 Hz -103 dBc/Hz @ 1 kHz -103 dBc/Hz @ 10 kHz -110 dBc/Hz @ 100 kHz -130 dBc/Hz @ 1 MHz	—
Power	Vdc mA	+15 150

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

