

Frequency Synthesizer

Features

- Frequency: 8000 – 8500 MHz
- Low Phase Noise
- Low Spurious Outputs
- High Reliability
- External Reference Model

API Technologies 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.

Specifications

CHARACTERISTIC	TYPICAL Ta = +25°C	MIN/MAX Ta = -10°C to +60°C
Frequency (MHz) ⁽¹⁾	8000 – 8500 MHz	8000 – 8500 MHz
Output Power (dBm)	+13.0	0 / +17.0
Step Size (MHz)	10	—
Reference (MHz)	100	1 - 200
Harmonics (dBc)	-25	-20 Max.
Spurious (dBc)	-70	—
Phase Noise (8000 MHz)	-64 dBc/Hz @ 10 Hz -86 dBc/Hz @ 100 Hz -89 dBc/Hz @ 1 kHz -89 dBc/Hz @ 10 kHz -125 dBc/Hz @ 100 kHz -140 dBc/Hz @ 1 MHz	—
Power	Vdc mA	+15 200
		+15 —

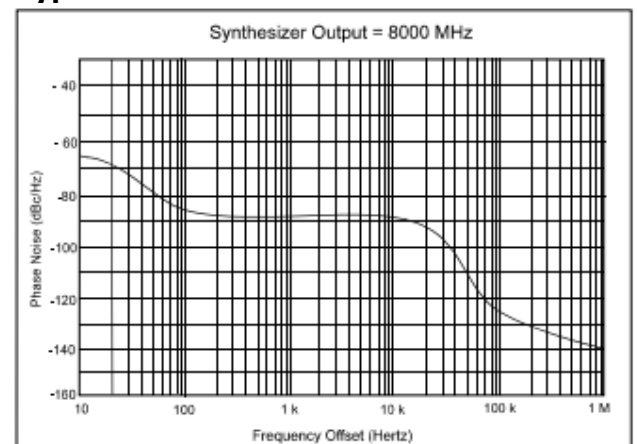
⁽¹⁾ Customer specifies center frequency bandwidth ± 150 MHz

Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Case Temperature	+85°C
DC Voltage	+24 Volts

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

Typical Performance Data



Package Outline Drawing

