Frequency Synthesizer Module
FS3840A

The FS3840A is an extremely wideband frequency synthesizer module featuring 1 Hz tuning resolution, very low spurious, and excellent phase noise. The unit can be programmed by the user to operate from either the internal TCXO reference or an external source. The FS3840A can be used as a stand-alone frequency source conveniently controlled by a PC via its RS-232 serial port. Alternatively, the FS3840A can be programmed via a 4-wire serial interface for embedded applications.

The unit runs from a single +15 Vdc supply. Its wide bandwidth, fine resolution, and a rich complement of programming commands makes the FS3840A ideal for a variety of applications.

SPECIFICATIONS

Frequency Range: 29 to 3840 MHz
Tuning Resolution: 1 Hz
Switching Speed: < 5 msec
Output Power: +10 dBm +/- 2dB
Spurious: < -70 dBc
Phase Noise: -130 dBc/Hz, 10 kHz offset at 100 MHz
-110 dBc/Hz, 10 kHz offset at 1.0 GHz
Reference: Selectable Internal or External
Internal Reference Stability: +/- 1.0 ppm
Reference Output: 10 MHz, +3 dBm
External Reference Input: 2, 4, 5, 8, 10 or 16 MHz
Control Interface: Selectable RS-232 or 4-wire serial
DC Power Requirement: +15 Volts, 480 mA

MECHANICAL SPECIFICATIONS

RF Connectors: RF Out, Ref In, Ref Out: SMA Female
Control/DC Power Connector: 14 pin, 2 row, 0.1” pitch
Dimensions: 5.390" W x 6.475" L x 0.662" H
Weight: < 1 lb. 6 oz.
Operating Temperature Range: -30°C to +70°C