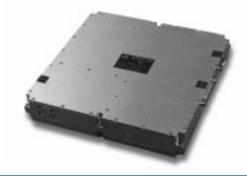
HIGH RESOLUTION DIRECT SYNTHESIZER

SPECIAL FEATURES

- Switching: 750 ns
- Phase Noise: 125 dBc/Hz @ 1 kHz
- 1 Hz Step Size Optional



This high resolution synthesizer is based on direct analog and direct digital synthesis techniques, and offers fast switching and superb close-in phase noise over a moderate bandwidth of 100 MHz. The DDS allows for finer resolution - as small as 1 Hz - and modulation capabilities such as PM, FM or chirp.

ELECTRICAL SPECIFICATIONS

Frequency Range: Step Size:	325 - 425 MHz 10 kHz ^{Note 1}
Switching Speed:	750 ns, maximum
Output Power:	+ 7 dBm, minimum
Output VSWR:	1.5:1
SSB Phase Noise (dBc/Hz, typical):	
offset	
10 Hz	- 70
100 Hz	- 95
1 kHz	- 125
Stability:	± 5 ppm (0 to + 50 °C)
Spurious:	- 50 dBc, maximum
Harmonics:	- 30 dBc, maximum
Tuning Control:	19 bit TTL plus Strobe
DC Power:	± 15 V, + 5 V (15 W)

The synthesizer was designed for use in a communications application where size was not critical; smaller, custom configurations are available. In fact, the outline can be reduced by as much as 50%. This model can be incorporated as a subassembly in more complex synthesizers or subsystems.

ENVIRONMENTAL SPECIFICATIONS

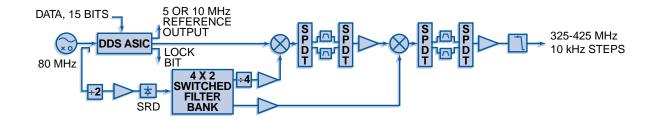
Operating Temperature:	- 40 to + 75 °C
Environment:	Ground

MECHANICAL SPECIFICATIONS

Size (nominal):

Connectors:

8 x 8 x 1.5 inches 203 x 203 x 38 mm SMA(F) and 44 & 9 Pin D-type



Note 1: 1 Hz step size is available. Specifications subject to change without notice.

84