SPECIAL FEATURES

• Small Step Size: 100 Hz

• Low Phase Noise: - 112 dBc/Hz @ 150 kHz offset

• Low Spurious: - 80 dBc



This synthesizer is a custom, iterative indirect synthesis design. It offers fine resolution and low phase noise and spurious over 1 GHz bandwidth in S-Band. Developed prior to the advent of DDS technology, the unit is an example of a complex, highly integrated

subsystem. This synthesizer is qualified for a military communications system. Depot replaceable source assemblies are available for excellent long-term maintainability.

ELECTRICAL SPECIFICATIONS

Frequency Range: 1.6 - 2.7 GHz Step Size: 100 Hz

Switching Speed: $350 \mu s$ to phase stability Output Power: $+ 5 dBm \pm 1.5 dB$, typical

SSB Phase Noise (dBc/Hz,typical):

offset

10 kHz - 100 50 kHz - 102 150 kHz - 112

Reference Input: 5 MHz @ 0 dBm

Stability: Follows Input Reference Signal

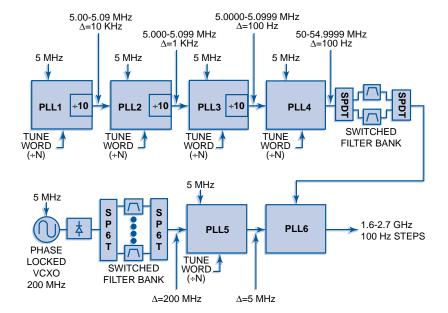
Spurious:
- 80 dBc, maximum
Harmonics:
- 45 dBc, maximum
Tuning Control:
40 bit Differential
BITE Scheme:
Phase Lock bits & LEDs
DC Power:
± 15 V, + 5 V (28 W)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 0 to + 70 °C Environment: Shipboard

MECHANICAL SPECIFICATIONS

Size (excluding connectors): 7.5 x 7.25 x 5.25 inches 191 x 184 x 133 mm Weight: 14 lbs (6.35 kg), maximum



Specifications subject to change without notice.