Synthesizers
X to Ku Band Synthesizer “In Bands”, 8 - 15 GHz
Model: SYN099

Features:
- Low Phase Noise
- Fast Switching: < 250 µs
- Low DC Power Consumption: < 14 watts
- BIT for Phase Lock
- Small Size: < 31 cubic inches
- Low Weight: < 2 lbs

Electrical Specifications
- Frequency Range: 8 - 15 GHz
- Bandwidth: 500 MHz, maximum
- Step Size: 5 MHz
- Switching Speed: 250 µs to within 10 kHz of the final frequency
- Output Power: + 10 dBm ± 2 dB, nominal
- SSB Phase Noise (dBc/Hz, typical):
  - Offset
    - 10 kHz: - 90
    - 100 kHz: - 105
    - 1 MHz: - 125
- Reference Signal: 100 MHz input @ 0 dBm, min
- Accuracy: Same as Reference Input
- Spurious: - 60 dBc, maximum
- Harmonics: - 30 dBc, maximum
- Tuning Control: 8 bit Parallel plus Strobe
- BITE Scheme: Phase Lock bit (TTL “1” = lock indicated)
- DC Power: + 28 V @ 180 mA, typical
- + 15 V @ 500 mA, typical
- + 5 V @ 100 mA, typical
- Power Consumption: 14 W, typical
- MTBF: 25,000 hrs (+ 85 °C )

Note 1: Step sizes as low as 1 MHz are available.

Environmental Specifications
- Operating Temperature: - 40 to + 85 °C, baseplate
- Environment: Airborne and Ground

Mechanical Specifications
- Size (no connectors): 6 x 3.6 x 1.4 inches
- 152 x 91 x 36 mm
- Weight: 2 lbs (0.9 kg), maximum
- Connectors: Sub-D, 25 pin and SMA (F)