

Synthesizers

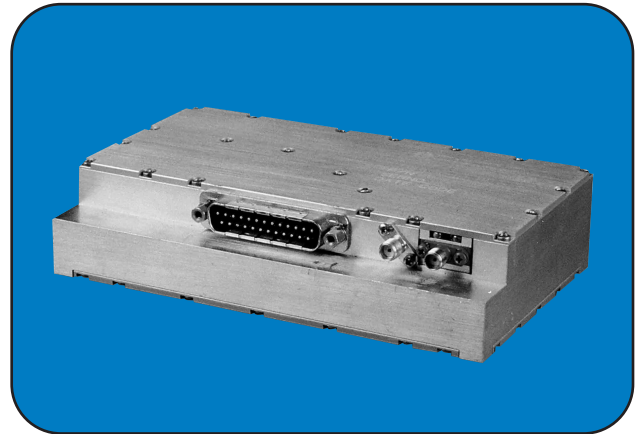
X to Ku Band Synthesizer "In Bands", 8 - 15 GHz

Model: SYN099



Features:

- Low Phase Noise
- Fast Switching: < 250 μ s
- 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 ^{Note 1}
Switching Speed:	250 μ s to within 10 kHz of the final frequency
Output Power:	+ 10 dBm \pm 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 $^{\circ}$ C)

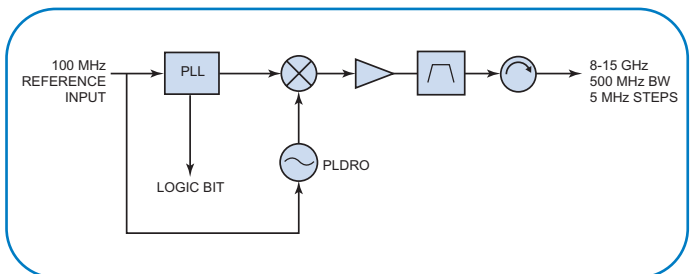
Note 1: Step sizes as low as 1 MHz are available.

Environmental Specifications

Operating Temperature: - 40 to + 85 $^{\circ}$ 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)



Specifications subject to change without notice.