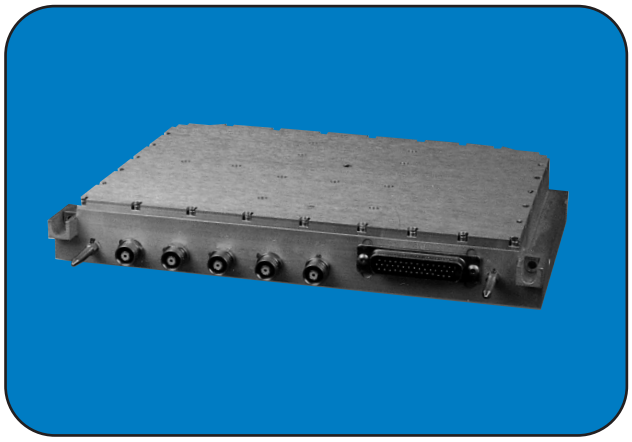
Synthesizers
Dual Indirect Synthesizer "Ping-Pong", 1.5 - 1.8 GHz
Model: SYN090

Features:

- Ultra Fast Switching: 500 ns
- Low Phase Noise
- High Vibration Operation: 20 grms
- Ping-Pong for Radar Applications



Electrical Specifications

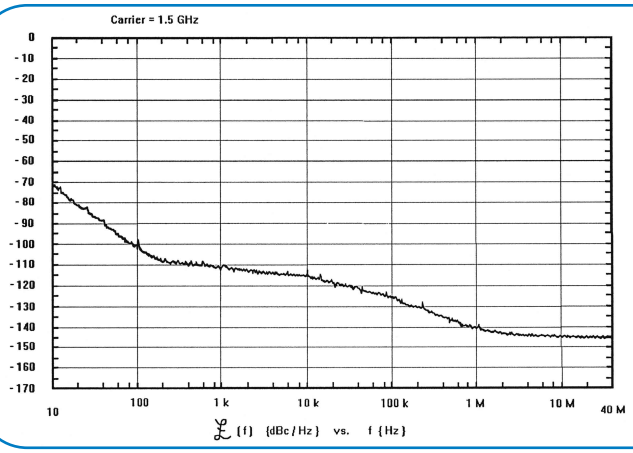
	Output, Port 1	Ref. Input, Port 2	LO Input, Port 3
Frequency Range:	1.5 - 1.8 GHz	64 MHz	1920 MHz
Step Size:	2 MHz, typical		
Switching Speed: Note 2			
Channel to Channel	500 ns, maximum		
Single Channel	25 µs, typical		
Output Power:	+ 12 dBm, typ	ECL	+ 10 dBm
Power Flatness:	± 2 dB		± 2 dB
SSB Phase Noise (dBc/Hz, typical):			
Offset			
1 kHz	- 110	- 150	- 117
10 kHz	- 112	- 155	- 127
100 kHz	- 123	- 155	- 127
1 MHz	- 140	- 155	- 137
Accuracy:	Same as Reference Input		
Spurious:	- 60 dBc, maximum		
Harmonics:	- 40 dBc, maximum		
VSWR:	1.5:1, typical		
Tuning Control:	9 bit TTL, Parallel plus Strobe		
BITE Scheme:	Amplitude & Phase Lock bits		
RF Monitor Outputs:	Port 5 & Port 6; 0 dBm ± 3dB		
DC Power:	+ 15 V @ 800 mA, typical - 15 V @ 100 mA, typical + 5 V @ 1500 mA, typical - 5 V @ 300 mA, typical		
Power Consumption:	23 W, typical		

Environmental Specifications

Operating Temperature:	- 54 to + 55 °C, baseplate
Operating Vibration:	20 g_{rms}
Vibration Sensitivity:	5 x 10^{-10}/g
Environment:	Various

Mechanical Specifications

Size (no connectors):	9 x 6 x 1.5 inches 229 x 153 x 38 mm
Connectors:	44 Pin "D", Blind Mate RF
Weight:	4 lbs (1814 g), approximate



Note 1: Performance variations offered in the same volume may affect other specifications.

Note 2: Switching speed is specified to within ± 5° of the final frequency. See application note on Page 104.

Specifications subject to change without notice.

TRAK Microwave Corporation
E-Mail: sales@trak.com ▪ www.trak.com
Ph: 813-901-7200 ▪ US Toll Free: 1-888-283-8444
4726 Eisenhower Boulevard ▪ Tampa, Florida 33634-6391 USA

smiths