

SPECIFICATIONS

Output Frequency

Tuning range:	8400 - 9700 MHz	
Frequency step size:	100 kHz	
Frequency stability and accuracy:	±1 PPM	
Aging (per year):	±1 PPM	
Phase noise in dBc/Hz (typ.):	L(10 Hz)	-50
	L(100 Hz)	-70
	L(1 kHz)	-85
	L(10 kHz)	-87
	L(100 kHz)	-87
	L(1 MHz)	-116
	L(10 MHz)	-130
Spurious:	-65 dBc	
Harmonics (max.):	-40 dBc	
Power out (min.) into 50Ω:	+20 dBm	
Output power variation (freq. & temp.):	3 dB (max)	
Load VSWR:	1.8:1	

Frequency Tuning / Alarm

Frequency control:	Parallel BCD Coded CMOS Input
Acquisition time (typ.):	100 msec
Phase-lock indicator:	High=LOCK (open collector)

Reference Frequency Output

Output frequency:	(Sine Wave) 60 MHz
Output power (min.) into 50Ω:	+10 dBm

DC Power

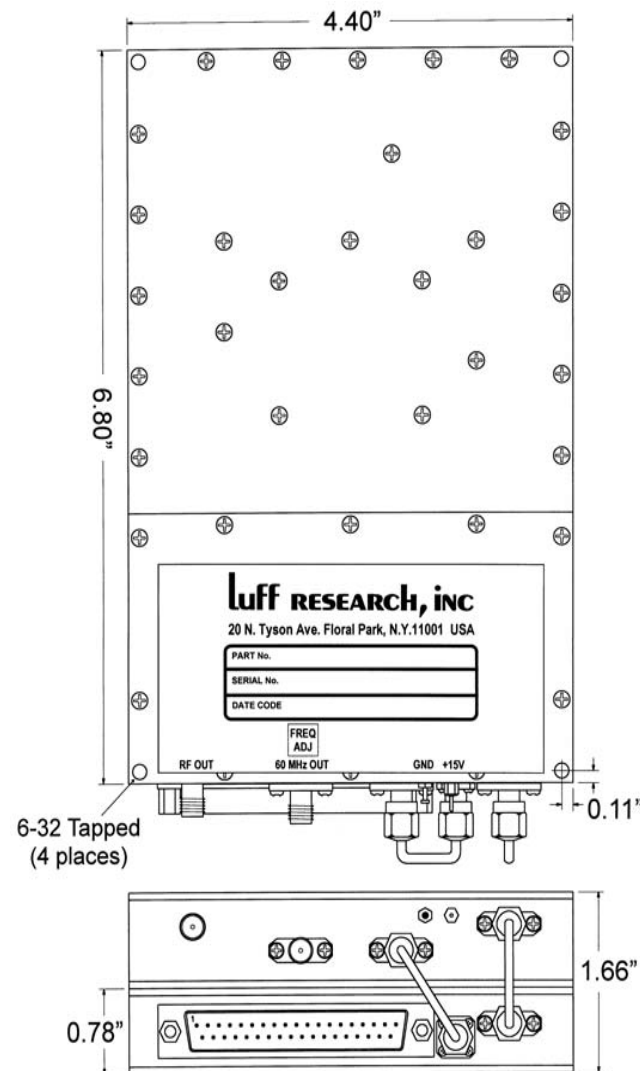
+5.2V (min) +7.0V (max) Synthesizer	650 mA
+15.0V (min) +17.0V (max) Synthesizer	150 mA
+15.0V (min) +15.5V (max) Aux. Module	250 mA

Mechanical

RF connectors:	2 SMA (F)
Digital & DC connection:	DB37 (M) / Filtered Feedthroughs

Environment

Operating temperature range (surface):	0°C to 70°C
Storage temperature range:	-40°C to 85°C
Relative humidity (non-condensing):	90%RH @ 40°
Shock (MIL-STD-810E):	20G 11±1ms
Vibration (MIL-STD-810C):	1.5G / 5Hz - 200Hz



Notes:

1. The input (DB37M) is an EMI filtered connector (1000pF per pin).
2. This is an EMI shielded housing.
3. Frequency Adjustment is provided on top of the unit.

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PRODUCT DATA SHEET

TLS FREQUENCY SYNTHESIZER

Model: TLSC84009700/100K-1

Rev. C

08/10/04