

SPECIFICATIONS

Output Frequency

Tuning range:	12 - 25 GHz												
Frequency step size:	200 kHz												
Frequency stability and accuracy (Ext ref):	Same as input												
Frequency stability and accuracy (Int ref):	±0.5 PPM (over temp range)												
Aging (After 2 months):	±1 PPM max per year @ 25°C												
Adjustability (typ.):	10 years												
Phase noise in dBc/Hz (typ.):	<table border="1"> <tr><td>L(10 Hz)</td><td>-49</td></tr> <tr><td>L(100 Hz)</td><td>-68</td></tr> <tr><td>L(1 kHz)</td><td>-84</td></tr> <tr><td>L(10 kHz)</td><td>-89</td></tr> <tr><td>L(100 kHz)</td><td>-91</td></tr> <tr><td>L(1 MHz)</td><td>-112</td></tr> </table>	L(10 Hz)	-49	L(100 Hz)	-68	L(1 kHz)	-84	L(10 kHz)	-89	L(100 kHz)	-91	L(1 MHz)	-112
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L(10 kHz)	-89												
L(100 kHz)	-91												
L(1 MHz)	-112												
Spurious (max.):	-60 dBc												
Harmonics & Subharmonics (typ.):	-20 dBc												
Power out (min.):	+10 dBm												
Output power variation (freq. & temp.):	3 dB												
Load VSWR:	1.5:1												

Input Frequency

Input reference frequency:	5 , 10, 100 MHz or Internal
Input ref. freq. level:	0 dBm ±3dB

Frequency Tuning / Alarm

Frequency control:	Serial RS-232 / RS-422 / RS-485
Acquisition time:	100 msec
Phase-lock indicator:	High = lock (Open collector or CMOS / TTL)

DC Power

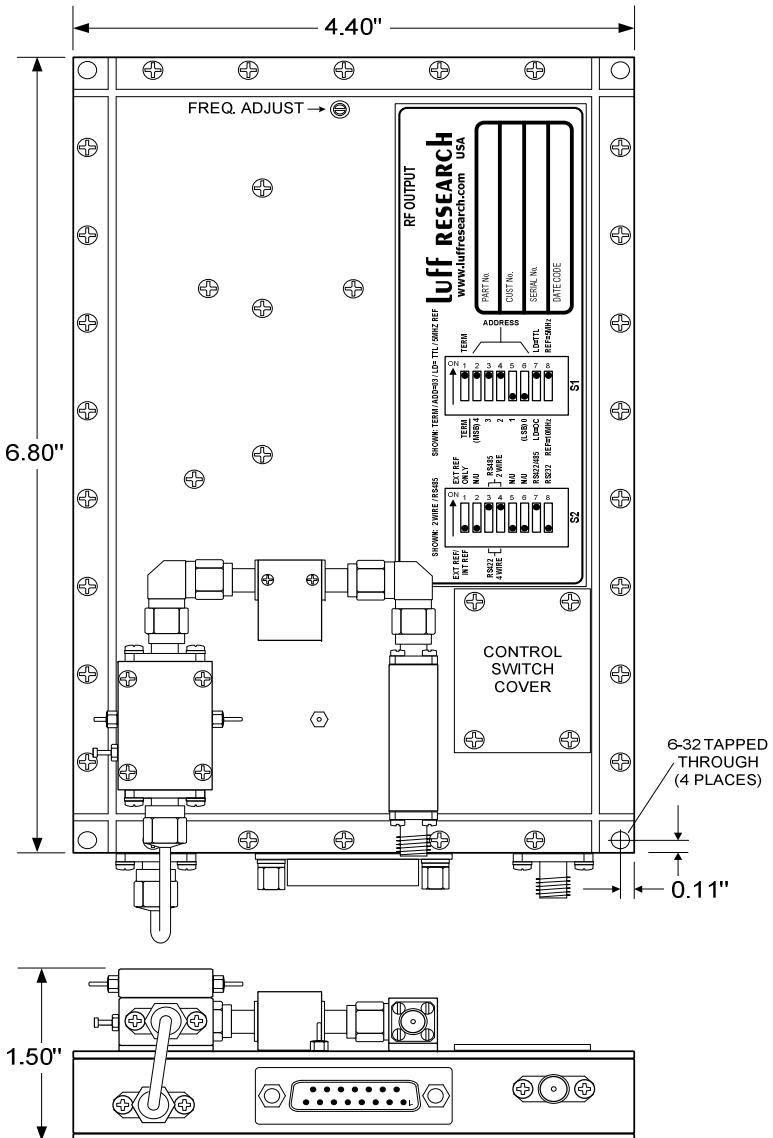
+5.2 Vdc (min) +5.5 Vdc (max)	900 mA
+15.0 Vdc (min) +17.0 Vdc (max)	150 mA

Mechanical

RF connectors:	SMA (F)
Digital & DC connection:	DB15 (M)

Environment

Operating temperature range (surface):	0°C to 60°C
Storage temperature range:	-40°C to 85°C
Relative humidity (non-condensing):	90%RH @ 40°
Shock:	30 G / 10msec
Vibration:	4 G / 20 Hz - 20 kHz
EMI leakage (typ.):	-90 dBc



Notes:

1. This is an EMI gasketed package with a filtered DB15 connector (1000pF per pin).

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PRODUCT DATA SHEET

TLSE FREQUENCY SYNTHESIZER

Model: TLSE1200025000/200K

09/19/11