

## SPECIFICATIONS

### Output Frequency

|   |                |      |
|---|----------------|------|
| Tuning range:                           | 940 - 2860 MHz |      |
| Frequency step size:                    | 100 kHz        |      |
| Frequency stability and accuracy:       | Same as Input  |      |
| Phase noise in dBc/Hz (typ.):           | L(100 Hz)      | -80  |
|   | L(1 kHz)       | -85  |
|   | L(10 kHz)      | -90  |
|   | L(100 kHz)     | -95  |
|   | L(1 MHz)       | -120 |
| Spurious:                               | -60 dBc        |      |
| Harmonics (typ.):                       | -20 dBc        |      |
| Power out (min.):                       | +13 dBm        |      |
| Output power variation (freq. & temp.): | 3 dB           |      |
| Load VSWR:                              | 2:1            |      |

### Input Frequency

|                            |                  |
|----------------------------|------------------|
| Input reference frequency: | 10 MHz           |
| Input ref. freq. level:    | 0 dBm $\pm$ 3 dB |

### Frequency Tuning / Alarm

|  |   |
|--|---|
| Frequency control:<br>(please specify) | Parallel BCD Coded CMOS Input<br>or Serial RS-485 |
| Acquisition time (typ.):               | 100 msec  |
| Phase-lock indicator:                  | High = LOCK (open collector)                      |

### DC Power

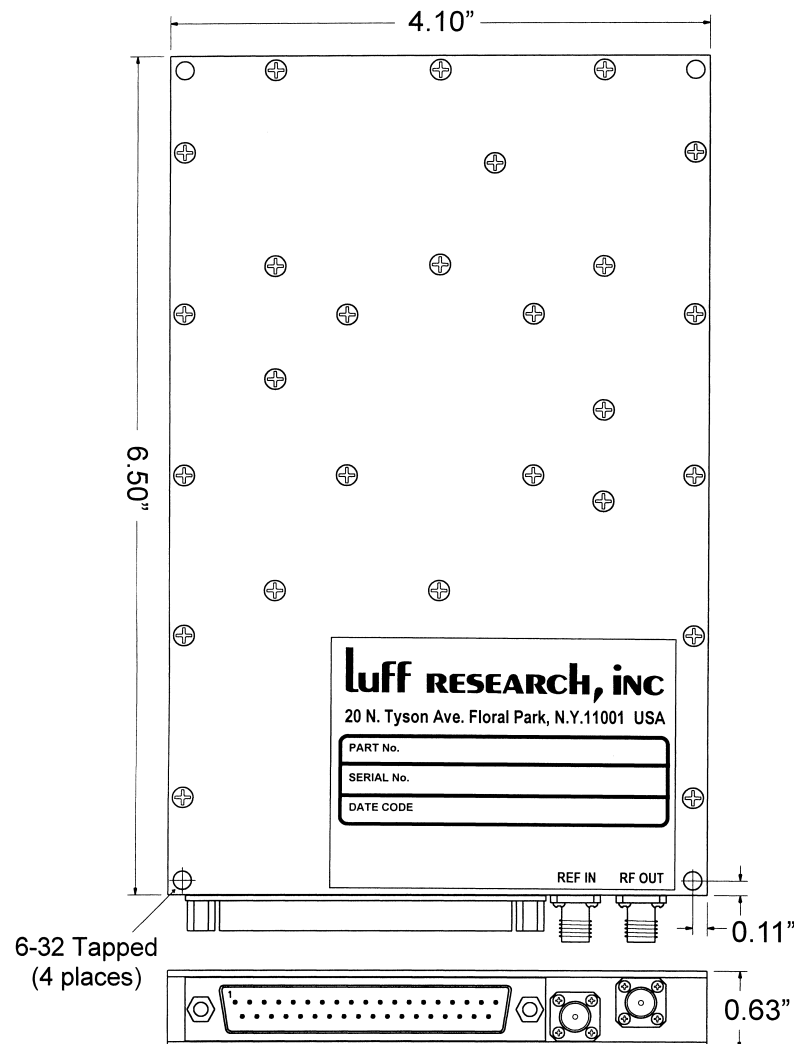
|                               |        |
|-------------------------------|--------|
| +5.2VDC (min) +7.0VDC (max)   | 600 mA |
| +15.0VDC (min) +17.0VDC (max) | 200 mA |

### Mechanical

|                          |           |
|--------------------------|-----------|
| RF connectors:           | 2 SMA (F) |
| Digital & DC connection: | DB37 (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 |



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**PRODUCT DATA SHEET**  
**TLS FREQUENCY SYNTHESIZER**

|                         |        |          |
|-------------------------|--------|----------|
| Model: TLS09402860/100K | Rev. B | 11/19/01 |
|-------------------------|--------|----------|