

EITEL-MCCULLOUGH, INC.

VOLTAGE TUNABLE MAGNETRON
FREQUENCY
600-1200 Mc
MINIMUM
OUTPUT POWER
5 WATTS

TYPICAL PERFORMANCE

ELECTRICAL

| Frequency Range | _ | _ | _ | - 6 | 00-1 2 00 Mc |
|-------------------------|---|---|---|------|---------------------|
| Anode Voltage | _ | - | - | - 12 | 50-2450 V |
| Cathode Current | - | - | - | _ | 9- 2 5 mA |
| Typical Output Power - | - | - | - | _ | 5.5 watts |
| Anode FM Sensitivity - | _ | - | - | - | 0.48 Mc/V |
| Injection Anode Voltage | _ | - | - | - | 100 V |
| Injection Anode Current | _ | - | - | _ | 0 m A |
| Heater Voltage (AC) - | - | - | | - | 6.3 V |
| Heater Current (AC) - | _ | - | _ | | 0.8 A |
| Load Impedance | - | - | - | - | 50 ohms |
| Service | - | _ | - | - | cw |

*MAXIMUM RATINGS

| Anode Voltage | _ | _ | - | - | - | - 3000 V |
|-------------------------|---|---|---|---|---|----------|
| Cathode Current | | | | | | |
| Injection Anode Voltage | - | - | - | - | - | -+500 V |
| Injection Anode Current | - | - | - | _ | | - 1 mA |

*Damage to the tube may occur if maximum ratings are exceeded.

MECHANICAL

| - | - | - | - | - | Any |
|---|---|---|---|---|----------------|
| - | - | - | - | - | Forced Air |
| | _ | - | - | - | Flexible Leads |
| | - | - | - | - | TNC Jack |
| - | - | - | - | - | 1.5 Pounds |
| | - | | | | |

ENVIRONMENTAL

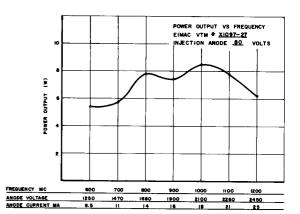
| Vibration | | _ | _ | _ | _ | | _ | _ | | 10 G-(to 2kc) |
|-----------|---|---|---|---|---|---|---|---|---|---------------|
| Shock | _ | _ | _ | _ | _ | _ | _ | _ | _ | 100 G-(11 ms) |
| Altitude | | _ | _ | _ | _ | | _ | _ | _ | 70,000 ft. |

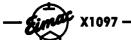
OUTLINE DIMENSIONS

| Height | _ | _ | _ | _ | _ | _ | _ | _ | _ | - 2 inches |
|--------|---|---|---|---|---|---|---|---|---|----------------|
| Width | _ | _ | - | _ | - | _ | _ | _ | - | - 1-1/4 inches |
| Length | _ | _ | _ | _ | _ | _ | _ | _ | _ | - 3.5 inches |



L-BAND OSCILLATOR





APPLICATION NOTES

- 1. COOLING: To insure optimum tube performance the magnet temperature should be maintained below 70° C.
- 2. PROXIMITY OF FERROUS MATERIALS: To minimize variations in performance, ferrous materials should be kept at least 6 inches from the magnetron package. Modulation of the tube may be produced by rotating ferrous materials and such parts as fans, shafts and couplings should be placed as far from the magnetron package as possible. Transformers and chokes should not be placed in such close proximity to the tube that their stray magnetic fields will interfere with the magnetron operation.
- 3. This tube was designed for operation in missile environments and can be operated for short periods of time without any cooling.
- 4. ANODE VOLTAGE: The operating frequency is a function of the anode voltage; therefore, any voltage ripple on the anode supply will appear as frequency modulation on the RF output signal.

