

**GYRO-TUNED
COAXIAL PULSE MAGNETRON**

L-5407

75 Kilowatts Minimum Peak Power
Mechanical Tuning Range 9.0 to 9.5 GHz
Gyro-Tuning Range 175 MHz, Nominal
Gyro-Tuning Rate 200 Hz

This lightweight, metal-ceramic coaxial magnetron features gyro-tuning to provide frequency agility in airborne search, navigation, terrain following and missile seeker radar applications.

Gyro-tuning employs a ring gear which drives a set of rotating dielectric paddles within the magnetron coaxial cavity. A high speed synchronous motor drives the entire mechanism, which is external to the tube vacuum envelope. The complete tuner assembly is compact and adds only 1/2 pound to the basic magnetron weight.

OPERATING CONDITIONS

Heater Voltage 12.6 V
Heater Current 2.0 A
Preheat Time Min. 120 sec.
Pulse Voltage Nominal 15 kVdc
Pulse Current 15 A

ABSOLUTE MAXIMUM RATINGS

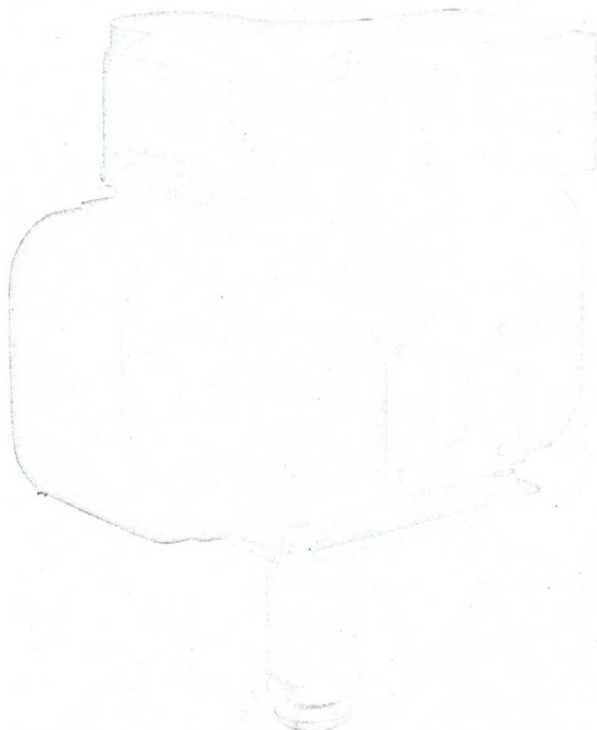
Heater Voltage 14.0 V
Heater Surge Current 6 A
Pulse Current 18 A
Pulse Length 5.0 μ sec
Duty Cycle 0.0011
Anode Temperature 150° C
Cathode Temperature 185° C
VSWR 1.5:1 Ratio
Altitude 50,000 Feet

PERFORMANCE CHARACTERISTICS

Peak Power 75 kw Min.
Slow Tuner Range 9.0 to 9.5 GHz
Frequency Agility (Δf) 150-200 MHz
Frequency Agility Tuner Rate 200 Hz
Frequency Agility Read-out Accuracy ± 2 MHz

MECHANICAL RATINGS

Mounting Position Any
Weight 12.5 lbs. Max.
Mating Waveguide Flange UG-40/U
Anode Cooling Forced air



LITTON PRECISION PRODUCTS

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