

6543A

65 Kilowatts Minimum Peak Power
Tunable Frequency 8500 to 9600 mcs

The 6543 and the 6543A tunable pulse magnetrons are recommended in all new systems requiring a nominal power output of 80 kW and where tunability is a prime requisite. Extensive life testing demonstrates that these tubes are among the most reliable magnetrons available today.

The LT-6543A magnetron is selected for low frequency and time jitter characteristics and is recommended for use in those systems where tunable moving target indicator performance is required.

OPERATING CONDITIONS

Heater Voltage.....12.6 V
Heater Current.....2.2 A
Preheat Time.....Min. 180 sec.
Pulse Voltage.....13.5 to 16.5 kVdc
Pulse Current.....15 A
Rate of Rise of Voltage.....Max. 160 kv/us
Anode Cathode Capacitance.....Max. 12 uufd

ABSOLUTE MAXIMUM RATINGS

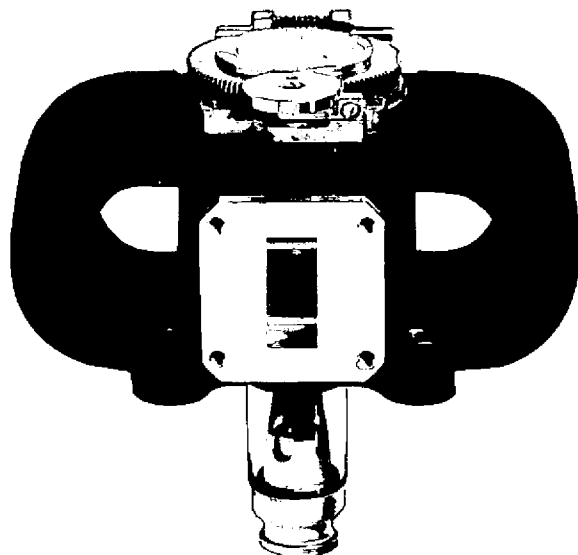
Heater Voltage.....13.7 V
Heater Surge Current.....10 A
Pulse Current.....18 A
Pulse Length.....5.0 us
Average Input Power.....350 W
Duty Cycle.....0.001
Anode Temperature.....150° C
Cathode Temperature.....175° C
VSWR.....1.5:1 Ratio
Altitude.....552 mmHg

PERFORMANCE CHARACTERISTICS

Peak Power.....Min. 65 kW
Tunable Frequency.....8500 to 9600 mcs
Pulling Factor (1.5:1 VSWR).....Max. 15 mcs
Missing Pulses.....Max. 1 Percent
Side Lobes.....Min. 8 db
Bandwidth.....Max. 2.0/tpc. mcs
Anode Temperature Co-efficient.....Max. 0.25 mc/°C
Vibration (5 to 500 cps).....0.01 Da or 5 G
Shock (11 m s).....15 G
Rated Cycle Life.....400 hrs.
6543A Only—Frequency Jitter.....Max. 60 kc
Time Jitter.....Max. 1.4 mus
Amplitude Jitter.....Max. 0.02 db

MECHANICAL RATINGS

Mounting Position.....Any
Weight.....6¹/₈ lbs.
Mating Mounting Flange.....UG-52A/U
Anode Cooling.....Forced Air
Output Pressurization.....Max. 45 lbs./sq. in.
Cathode Pressurization.....Max. 45 lbs./sq. in.



PULSE MAGNETRON

6543A

