from JEDEC release #3931, Oct. 15, 1962

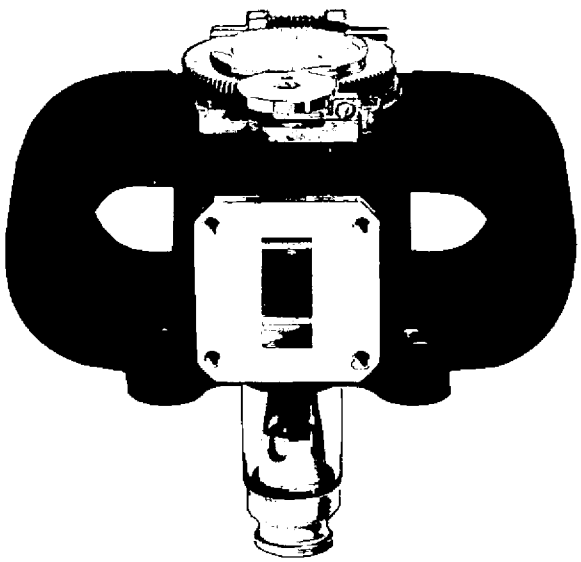
PULSE MAGNETRON

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	6⅛ 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.

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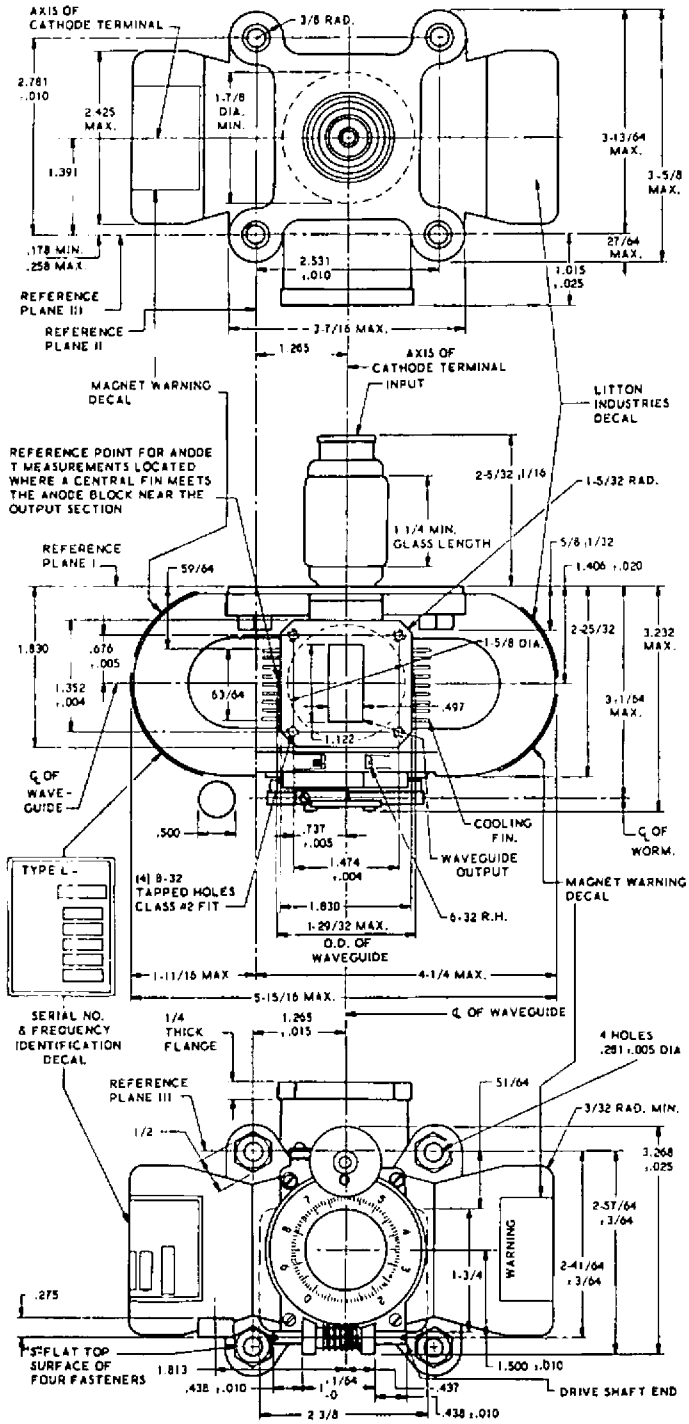
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