

GL-6625

KLYSTRON

960-1215 MEGACYCLES

INTEGRAL RESONATORS

22 KILOWATTS PEAK OUTPUT

ELECTROSTATICALLY FOCUSED

DESCRIPTION AND RATING

The GL-6625 is a three-resonator tunable amplifier klystron for pulsed operation up to a maximum duty of twelve percent. The tube covers a frequency range of 960 to 1215 megacycles and will provide a peak power output of 22 kilowatts. The unipotential cathode is oxide-coated and indirectly heated. The r-f output coupling is for 7/8-inch coaxial 50-ohm line and matches UG-1126/U connectors. The input and center-cavity-monitor fittings are BNC type to accommodate UG-88/U connectors. The tube is forced-air cooled, features mechanically tuned integral resonators, and is electrostatically focused, which eliminates the necessity for external magnets or focus coils.

TECHNICAL INFORMATION

GENERAL

Electrical	Minimum	Bogey	Maximum	
Heater Voltage	4.5	5.0	5.5	Volts
Heater Current at 5 Volts	35	---	45	Amperes
Heater Starting Current	---	---	70	Amperes
Heater Cold Resistance	---	0.02	---	Ohms
Cathode Heating Time	5.0	---	---	Minutes
Frequency	960	---	1215	Megacycles
Capacitance, Cathode Gun	---	35	---	Micromicrofarads

Mechanical

Base and RF Connections - See Outline Drawing

Dimensions - See Outline Drawing

Mounting Position - Any

Air Flow 220 Min Cubic Feet
per Minute

Air flow of at least 220 cubic feet per minute is required for operation at maximum ratings. In any case, sufficient air cooling must be provided and distributed to keep temperatures below the indicated limits.

Operating Temperature

Tube Body 100 Max C

Cooling Fin Assembly 125 Max C

Net Weight, approximate 30 Pounds

G E N E R A L E L E C T R I C C O M P A N Y

MAXIMUM RATINGS AND TYPICAL OPERATION

Radio-Frequency Pulse Amplifier Maximum Ratings, Absolute Values

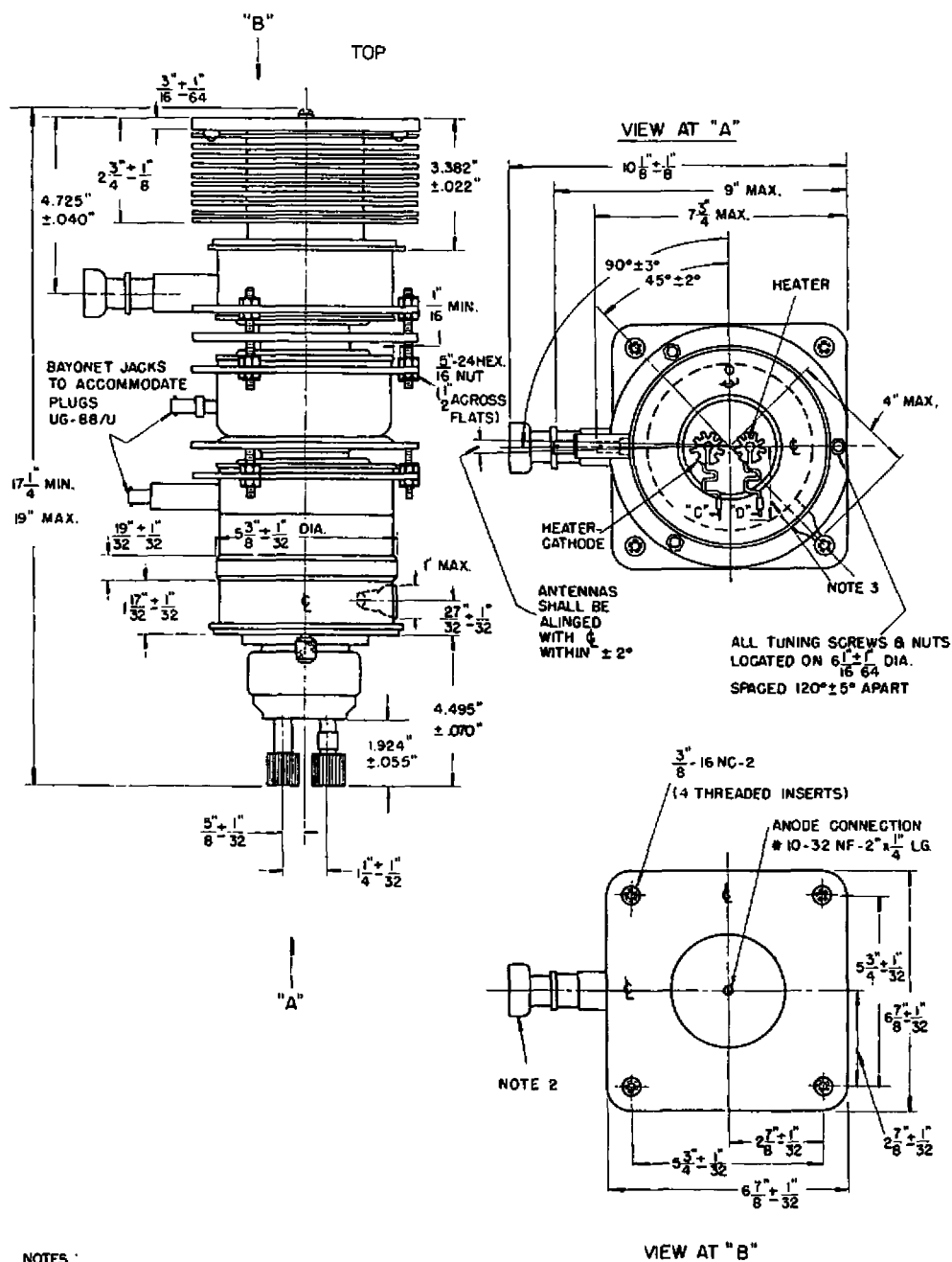
Peak Beam Voltage	20	Max Kilovolts
Peak Beam Current	9.35	Max Amperes
Average Beam Power	2400	Max Watts
RF Output Power, average	300	Max Watts
Beam Pulse Length	10	Max Microseconds
Duty Cycle	12	Percent

For periods of time not to exceed one millisecond, duty cycles up to forty percent may be used.

Typical Operation

Peak Beam Voltage	10	18	Kilovolts
Peak Beam Current	3	6.6	Amperes
Peak RF Input Power	40	100	Watts
Peak RF Output Power	7.5	22	Kilowatts
RF Pulse Length	3.5	3.5	Microseconds
Duty Cycle	6	1	Percent

TUBE DEPARTMENT
GENERAL ELECTRIC COMPANY
SCHENECTADY 5, N. Y.



NOTES :

1. AXIS OF TUBE SHALL BE PERPENDICULAR TO COLLECTOR END PLATE WITHIN $.015"$ FOR EVERY INCH. (THIS ASSUMES PARALLEL TUNING)
2. OUTPUT FLANGE SHALL ACCOMMODATE FLANGE UG-1126/U.
3. COMPRESSED LENGTH $1\frac{3}{4}"$ (MAX.) EXTENDED LENGTH $3\frac{1}{2}"$ (MIN.)