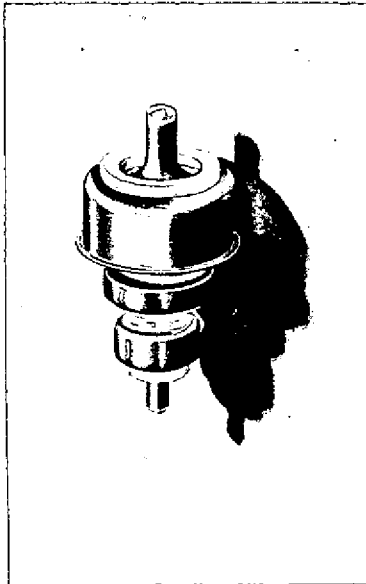


GL-7644 UHF TRIODE



**LOW POWER
GROUNDED-GRID CIRCUIT
VERY SMALL SIZE**

**METAL AND CERAMIC
CONDUCTION COOLED**

The GL-7644 is a miniature metal-and-ceramic triode for use in UHF grounded-grid amplifier applications under high pulse-power input conditions at a frequency of up to 3000 megacycles. The physical appearance and dimensions of this tube are identical to those of the GL-6299.

Electrical

Heater Voltage	6.3 ± 2%	Volts
Heater Current at 6.3 volts	300	Milliamperes
Direct Interelectrode Capacitances, approximate		
Grid to Anode	1.75	μf
Grid to Cathode	3.65	μf
Cathode to Anode, maximum	0.020	μf
Characteristics, Eb = 175 v d-c, Ib = 10 ma d-c, Ec adjusted		
Transconductance	15,000	Micromhos
Amplification Factor	110	

Mechanical

Mounting Position—Any	
Net Weight, approximate	1/6 Ounces

Thermal

Type of Cooling—Conduction*	
Seal Temperature, maximum	150 C

MAXIMUM RATINGS—ABSOLUTE VALUES

DC Plate Voltage	200 Volts	Duty Cycle	0.0011
DC Plate Current	12 Milliamperes	Pulse Width	15 Microseconds
Plate Dissipation	2 Watts	Peak RF Grid Voltage	7 Volts
Negative DC Grid Voltage	15 Volts		

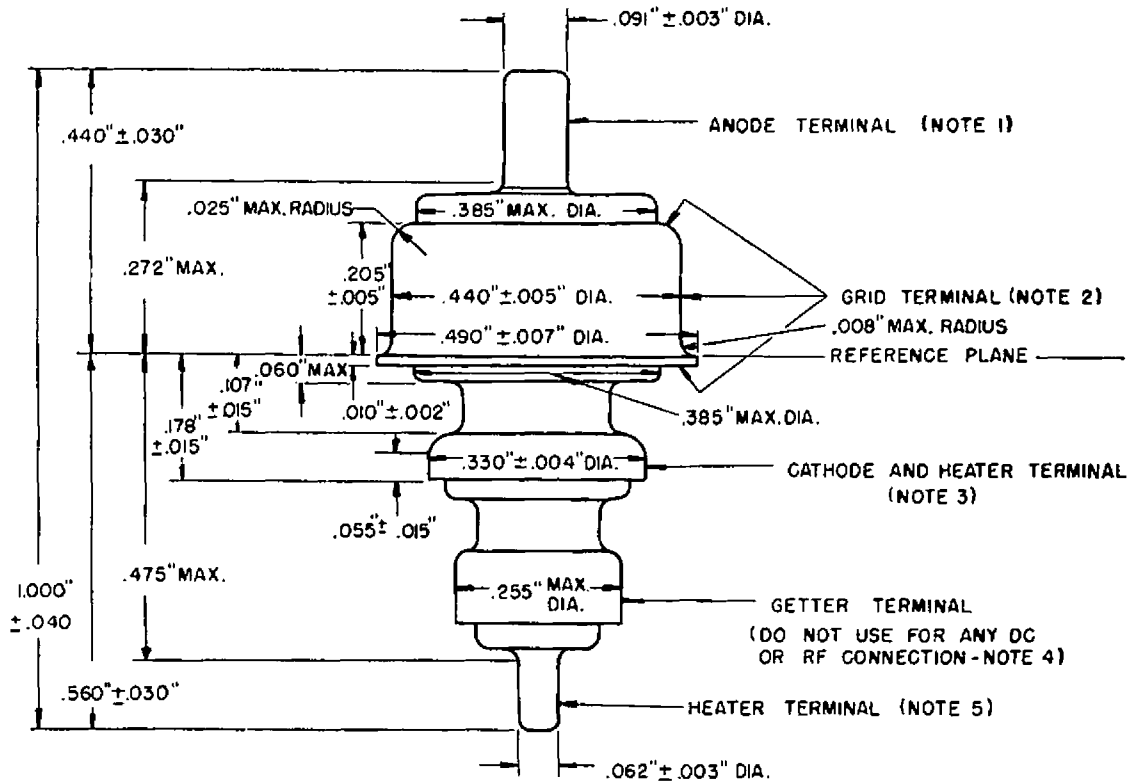
TYPICAL OPERATION

Class A₁ RF Amplifier

Grounded-grid Coaxial-type Circuit

Frequency	450 Megacycles	Duty Cycle	0.0011
Heater Voltage	6.3 Volts	Pulse Width	15 Microseconds
DC Plate Voltage, adjust for specified plate current	180 Volts	Noise Figure, power matched	4.5 Decibels
DC Plate Current	10 Milliamperes	Gain, 10 megacycle bandwidth	17.5 Decibels

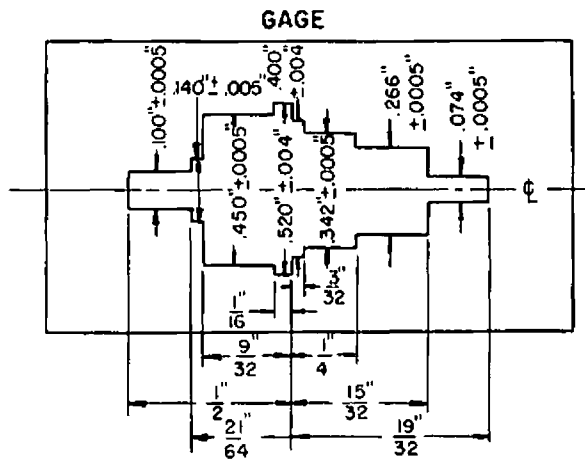
*The electrical connections to the anode and cathode must provide good thermal conductivity from these electrodes. The anode contact must be sufficiently flexible to keep the lateral force on the anode terminal at a minimum.



NOTES:

- 1. MAXIMUM ECCENTRICITY 0.007" (RUNOUT 0.014")
- 2. MAXIMUM ECCENTRICITY 0.008" (RUNOUT 0.016")
- 3. MAXIMUM ECCENTRICITY 0.010" (RUNOUT 0.020")
- 4. MAXIMUM ECCENTRICITY 0.015" (RUNOUT 0.030")
- 5. MAXIMUM ECCENTRICITY 0.010" (RUNOUT 0.020")

ECCENTRICITIES MEASURED WITH RESPECT TO CENTER LINE THROUGH GAGE. TUBE SHALL BE ROTATED 360° IN GAGE WITHOUT BINDING.



FRACTIONAL TOLERANCES

1/4" OR LESS ±.008" OVER 1/4" ±.015"