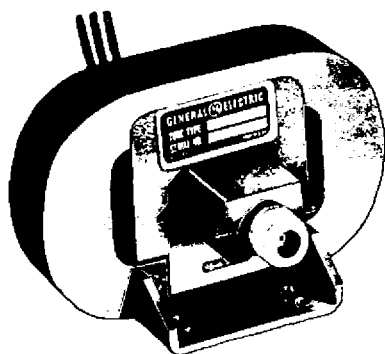


GL-7680

PACKAGED VOLTAGE-TUNABLE MAGNETRON



1000-2300 MEGACYCLES

1 WATT CW OUTPUT

The GL-7680 is a packaged voltage-tunable magnetron for voltage-tunable operation in the 1000-to-2300-megacycle frequency range. It is a complete r-f power source package requiring only input power connections and an r-f power output connection and has a

minimum CW power output of one watt across the entire frequency range. The tube may be voltage-tuned over a portion or all of the frequency range for which it is designed or operated at a fixed frequency. The voltage-frequency relationship is essentially linear.

Electrical

	Minimum	Bogey	Maximum
Cathode—Directly Heated			
Filament Voltage*	2.3	2.6	2.8 Volts
Filament Current	—	3.0	— Amperes

Mechanical

Mounting Position—Any	
Net Weight	3.5 Pounds

Thermal

Type of Cooling—Forced Air	
Air Flow	5 Cubic Feet Per Minute
Ambient Air Temperature, Maximum	50 C

MAXIMUM RATINGS—ABSOLUTE VALUES

Anode Voltage	2000 Volts	Injection Electrode Current	1.0 Milliamperes
Anode Current	20 Milliamperes	Filament Current	3.2 Amperes
Power Input, with forced-air cooling	45 Watts	Voltage Standing Wave Ratio	1.5
Injection Electrode Voltage	500 Volts		

TYPICAL OPERATION*Operation with 60-cycle Sweep Voltage in Wide-Band Circuit*

Filament Voltage*, approximate	2.60 Volts
Filament Current	3.0 Amperes
Tunable Range†	1000-2300 Megacycles
Tuning Sensitivity, approximate	1.2 Megacycles per Volt
Anode Voltage at 1.6 Kilomegacycles	1400 Volts

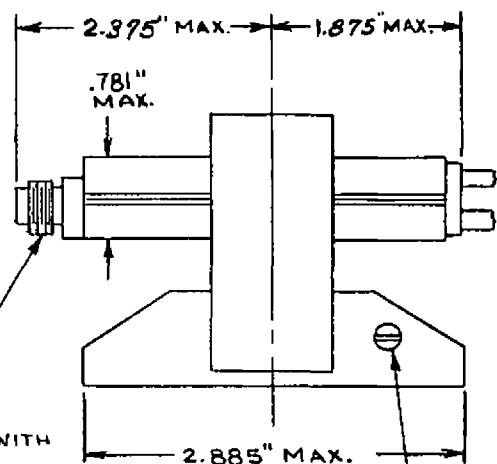
Anode Current, average	5 to 15 Milliamperes
Injection Electrode Voltage, positive with respect to cathode	200 to 400 Volts
Injection Electrode Current	0.1 Milliamperes
Voltage Standing Wave Ratio of Load	1.3
Power Output, minimum	1.0 Watts
Variation over Band	Less than 4:1

* Filament current should be adjusted to 3.0 amperes.

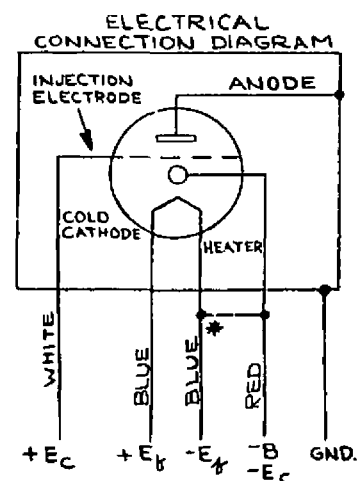
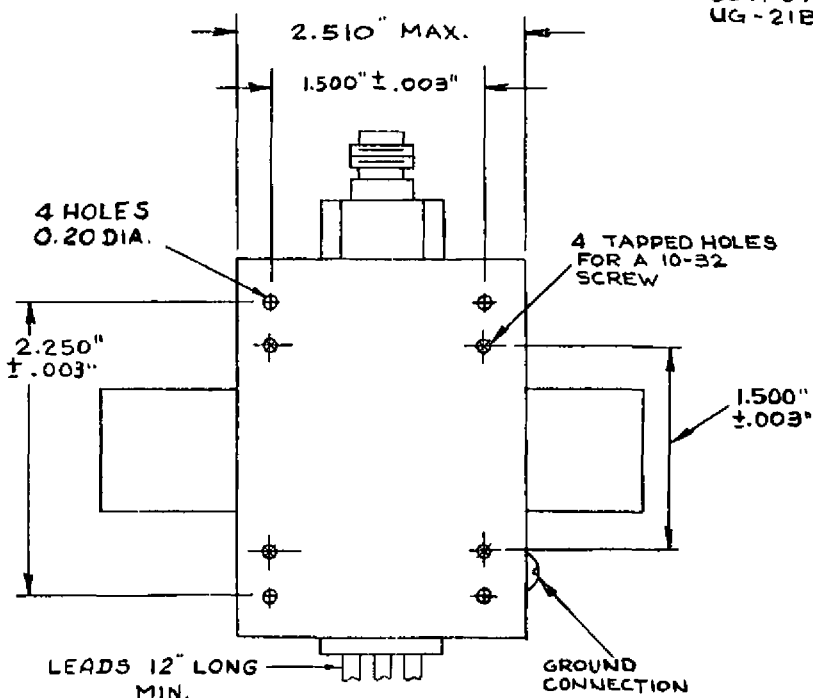
† Frequency controlled by anode voltage.

CAUTION: A clearance of nine inches between ferromagnetic materials and the tube will prevent any serious change of the operating characteristics.

GENERAL  ELECTRIC



NO. 10 SCREW
(GROUND CONNECTION)



K69087-72A903

12-62

GENERAL  ELECTRIC
POWER TUBE DEPARTMENT
Schenectady 5, N. Y.