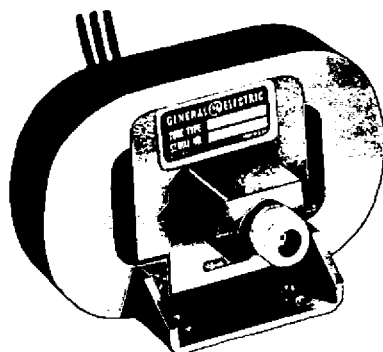


GL-7680

**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

<i>Operation with 60-cycle Sweep Voltage in Wide-Band Circuit</i>		Anode Current, average	5 to 15 Milliamperes
Filament Voltage*, approximate	2.60 Volts	Injection Electrode Voltage, positive with respect to cathode	200 to 400 Volts
Filament Current	3.0 Amperes	Injection Electrode Current	0.1 Milliamperes
Tunable Range†	1000-2300 Megacycles	Voltage Standing Wave Ratio of Load	1.3
Tuning Sensitivity, approximate	1.2 Megacycles per Volt	Power Output, minimum	1.0 Watts
Anode Voltage at 1.6 Kilomegacycles	1400 Volts	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.

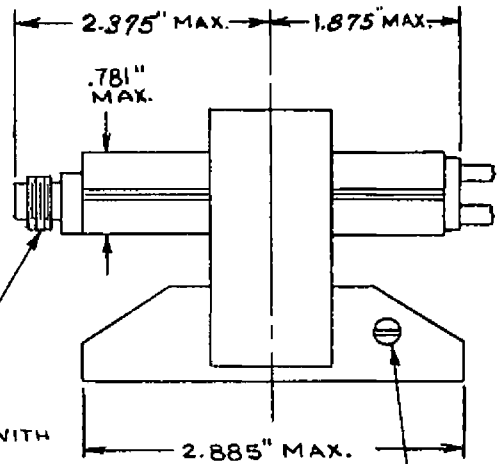
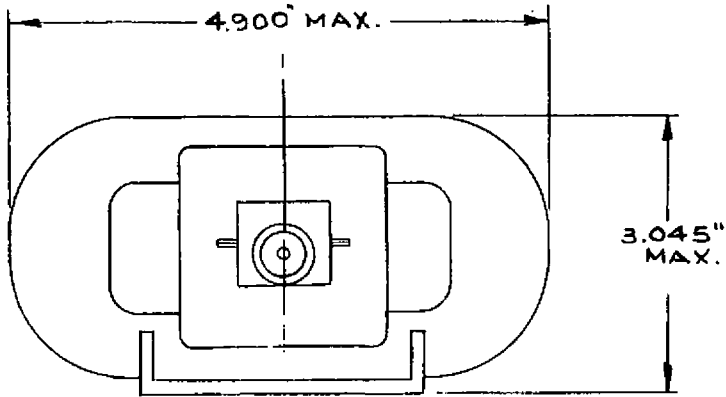
GENERAL  ELECTRIC

GL-7680

ET-T1679

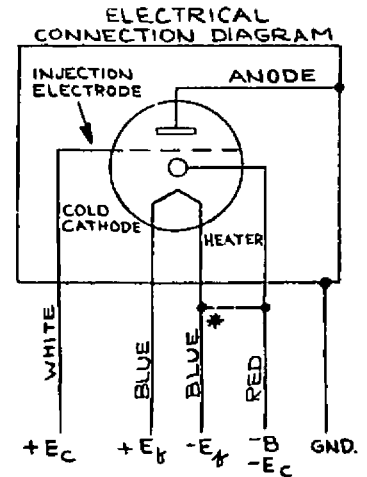
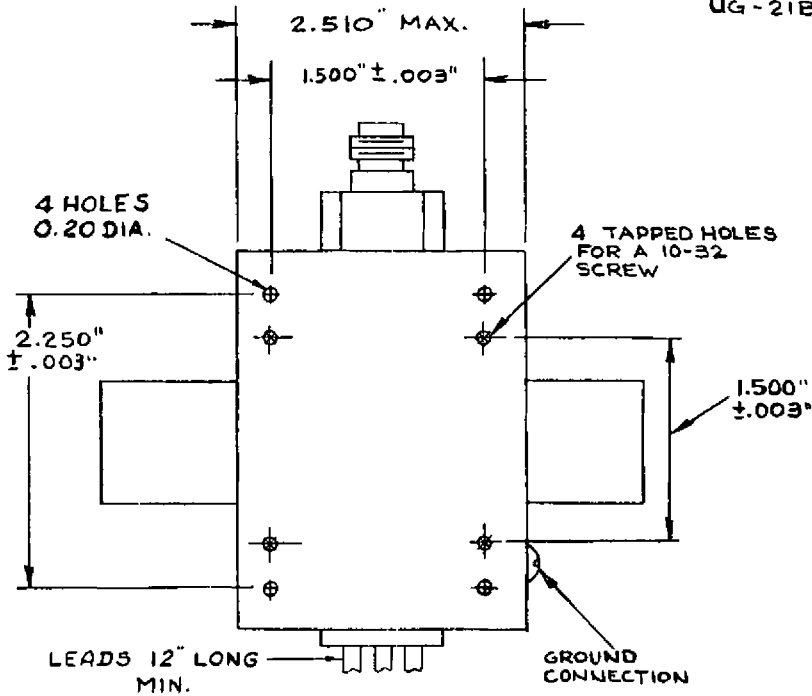
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OUTPUT MATES WITH UG-21B/U

NO. 10 SCREW (GROUND CONNECTION)



K69087-72A903

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*Note: An external connection is required between the cold cathode lead and one of the heater leads.

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

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