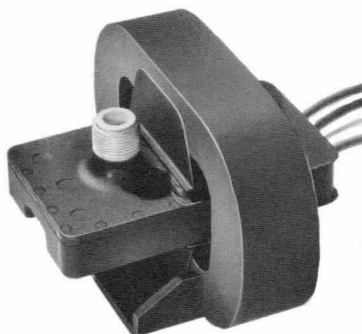


GL-7398

PACKAGED VOLTAGE-TUNABLE MAGNETRON

2200-3850 MEGACYCLES

2 WATTS CW OUTPUT



The GL-7398 is a packaged voltage-tunable magnetron designed for voltage-tunable operation in the 2200- to 3850-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 two watts 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*	2.2	2.5	2.7	Volts
Filament Current	—	3.0	—	Amperes

Mechanical

Mounting Position—Any	
Net Weight	3.5 Pounds

Thermal**MAXIMUM RATINGS—ABSOLUTE VALUES**

Anode Voltage	2000	Volts	Injection Electrode Current	1.0	Milliamperes
Anode Current	30	Milliamperes	Filament Current	3.2	Amperes
Power Input, with forced-air cooling	45	Watts	Voltage Standing Wave Ratio	1.5	
Injection Electrode Voltage	700	Volts			

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

Filament Voltage*	2.50	Volts
Filament Current	3.0	Amperes
Tunable Range†	2200—3850	Megacycles
Tuning Rate, approximate	3.0	Megacycles per Volt
Anode Voltage at 3 Kilomegacycles	1250	Volts

Anode Current, average	10 to 20	Milliamperes
Injection Electrode Voltage, positive with respect to cathode	300 to 600	Volts
Injection Electrode Current	0.1	Milliamperes
Voltage Standing Wave Ratio of Load	1.3	
Power Output, minimum	2.0	Watts
Variation over Band	Less than 4:1	

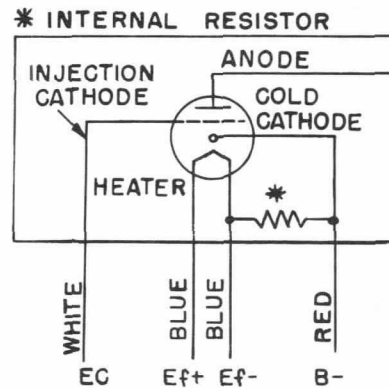
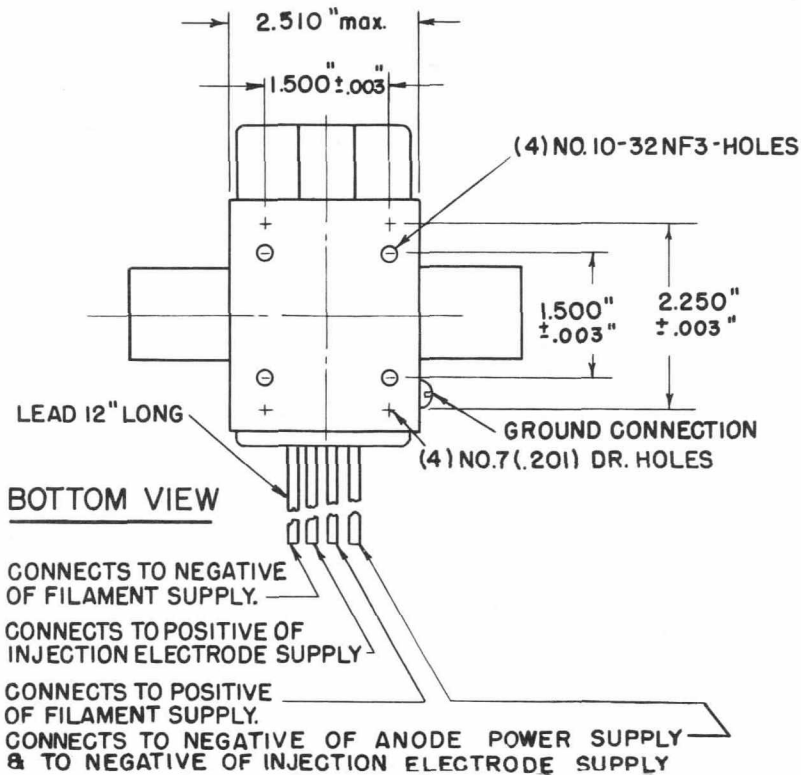
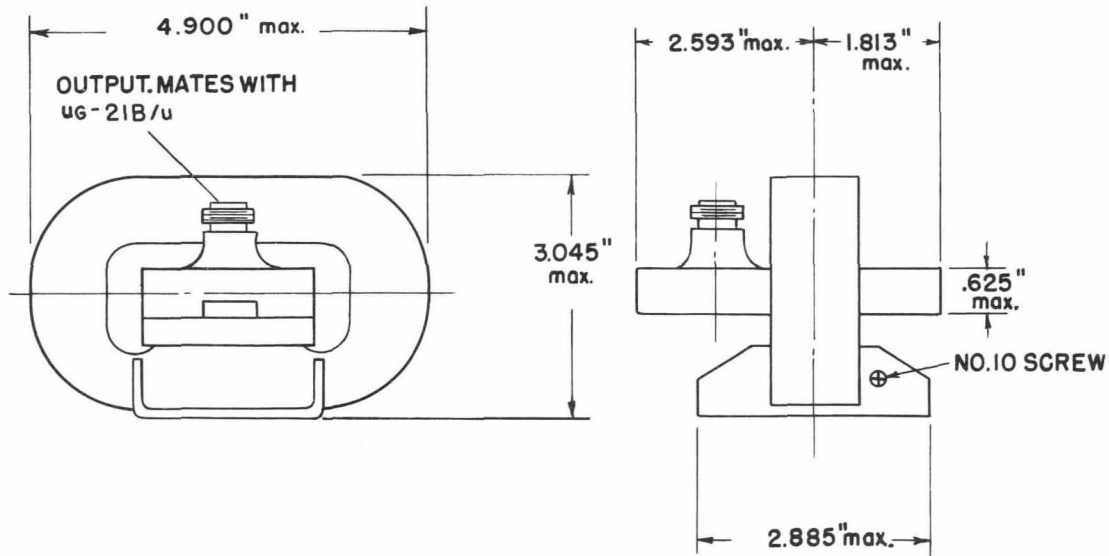
* Filament current should be adjusted to 3.0 amperes.

† Frequency controlled by anode voltage.

CAUTION: A clearance of 9 inches between ferro-magnetic materials and the tube will prevent any serious change of the operating characteristics.

GENERAL ELECTRIC

Supersedes ET-T1532A dated 6-60



K-69087-72A870

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NOTE: One side of filament is connected internally to the negative power supply lead.