

These ratings represent those of current samples of this type. Refer to the Objective Technical Information sheet for design-objective ratings.

This technical information is proprietary and is furnished only as a service to customers.

ZM-6223

PACKAGED VOLTAGE-TUNABLE MAGNETRON

2000-4000 Megacycles

1.25 Watt CW Output

The ZM-6223 is a packaged voltage-tunable magnetron designed for voltage-tunable operation in the 2000-to-4000-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 1.25 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.

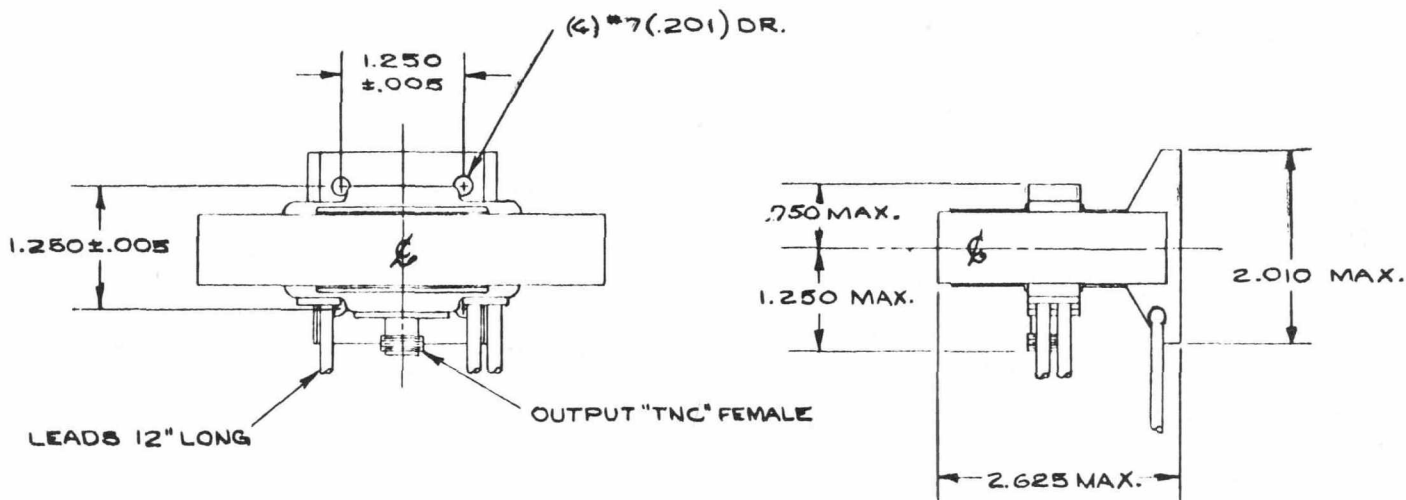
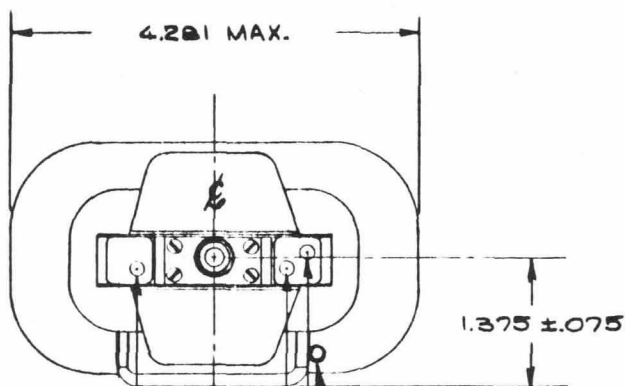
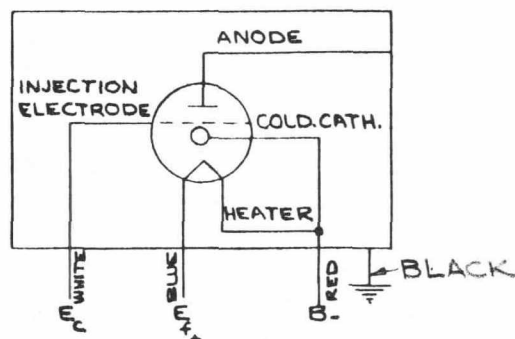
GENERAL

Electrical	Minimum	Bogey	Maximum	
Cathode -- Directly Heated				
Filament Voltage*	2.2	2.5	2.7	Volts
Filament Current	-	2.0	-	Amperes
Mechanical				
Mounting Position -- Any				
Net Weight, maximum			2.0	Pounds
Thermal				
Type of Cooling -- Forced Air				
Air Flow			5	Cubic Feet per Minute
Ambient Air Temperature, maximum			50	C
Typical Operating Conditions				
Operation with 60-cycle Sweep Voltage				
Filament Voltage*, approximate		2.50		Volts
Filament Current		2.0		Amperes
Tunable Range †		2000-4000		Megacycles
Tuning Sensitivity, approximate		2.65		Megacycles per Volt
Anode Voltage at 3.0 Gigacycles		1250		Volts
Anode Current, average		10-15		Milliamperes
Injection Electrode Voltage, positive with respect to cathode		130-450		Volts
Injection Electrode Current		0.01		Milliamperes
Voltage Standing Wave Ratio of Load		1.15		
Power Output, minimum		1.25		Watts
Variation over Band		Less than 4:1		

* Filament current should be adjusted to 2.0 amperes.

† Frequency controlled by anode voltage. VTM will stay in oscillation 50 megacycles below low end of the band.

CAUTION: A CLEARANCE OF NINE INCHES BETWEEN FERROMAGNETIC MATERIALS AND THE TUBE WILL PREVENT ANY SERIOUS CHANGE OF THE OPERATING CHARACTERISTICS.



GROUND (BLACK)

CONNECTS TO FILAMENT SUPPLY (BLUE).

CONNECTS TO POS. OF INJECTION ELECTRODE SUPPLY (WHITE).

CONNECTS TO NEG. OF ANODE POWER SUPPLY (RED).