

Communications & Power Industries Coaxial Pulsed Magnetron



A magnetron is a high power microwave oscillator in which the potential energy of an electron cloud near the cathode is converted into RF energy in a series of cavity resonators. The VMC3109 magnetron delivers high peak and average RF power for use in medical or industrial applications.

The VMC3109 will mount directly into new and existing sockets and can be operated under various pulse and input conditions to accommodate wide ranging operating requirements. In addition to high power, the VMC3109 provides excellent frequency stability, low jitter and extremely long life.

FEATURES:

- 5.7 GHz
- Tunable +/- 10 MHz
- 2.50 MW peak output power
- 2.50 kW average output power
- Liquid cooled

BENEFITS:

- High power
- Long life

APPLICATIONS:

- Industrial linear accelerator
- Medical linear accelerator

CPI C-Band 2.5 MW Coaxial Pulsed Magnetron: VMC3109

Electrical Specifications

Frequency	5.712 GHz	10MHz
Peak Power Output	2.50 MW	
Average Power Output	2.50 kW	
Pulse Voltage	45-50 kV	
Peak Anode Current	110 A	
Average Anode Current	110 mA	
Pulse Width	4.0 μ S	0.5 μ S
Duty Cycle	0.001	
Maximum Filament Voltage	18 V	
Maximum Filament Current	15 A	
Minimum Warm-Up Time	300 S	
Maximum Load VSWR	1.1:1	

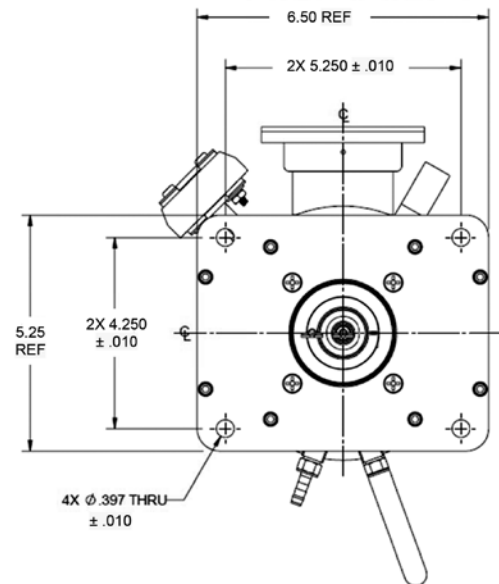
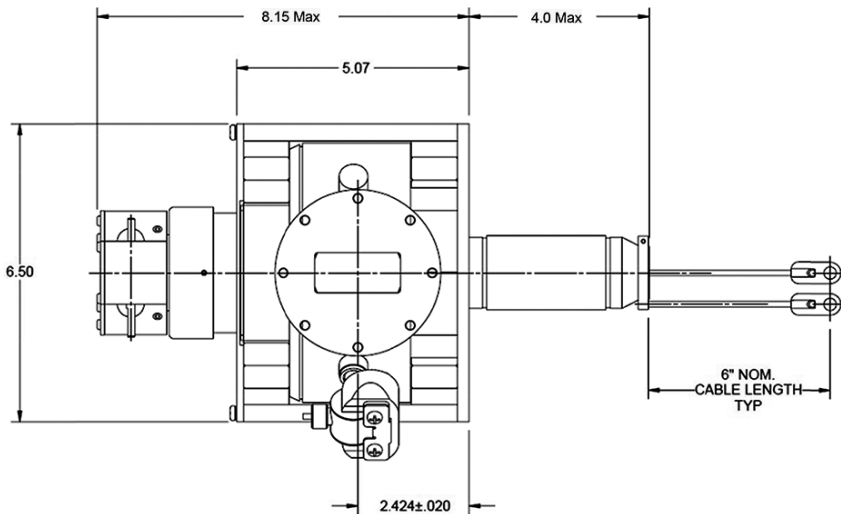
Mechanical and Environmental Specifications

Cooling	Liquid on body, forced air on cathode*
Temperature Range (ambient air)	55°C
Mounting Position	Any
Support	Mounting Flange
Coupling	WR187 mates with UG-148B/U choke flange
Tuning	10 turns, ~4.5 MHz per turn
Weight	35 lbs. (15.88 kg)

*Electrical specifications are typical. Other operating conditions are obtainable.

With a history of producing high quality products, we can help your with magnetron.

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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

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