## **Communications & Power Industries Coaxial 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 VMC3136 magnetron delivers high peak and average RF power for use in medical or industrial applications.

The VMC3136 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 VMC3136 provides excellent frequency stability, low jitter and extremely long life.

### **FEATURES:**

- 5.70 GHz
- Tunable +/- 10 MHz
- 2.50 MW peak output power
- 1.25 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: VMC3136

### **Electrical Specifications**

Frequency	5.70 GHz ± 5.72 MHz
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	55 mA
Pulse Width	$5.0  \mu S  +0$ , $-  0.4  \mu S$
Duty Cycle	0.0005
Maximum Filament Voltage	15 V
Maximum Filament Current	12 A
Minimum Warm-Up Time	300 S
Maximum Load VSWR	1.1:1
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Pushing factor

Pulse current 70 A to 110 A Frequency change 600 kHz – 400 kHz

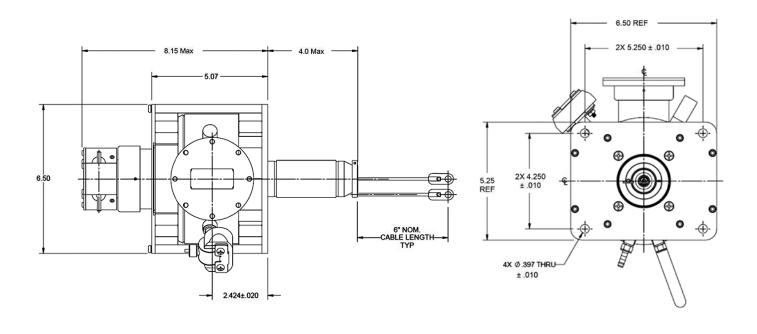
# Mechanical and Environmental Specifications

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	20 turns, 1 MHz per turn
Weight	35 lbs. (15.88 kg)

<sup>\*</sup> Natural convection. No cooling fan required.

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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