

CPI Electron Device Business - 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 VMX3045 magnetron delivers high peak and average RF power for use in medical or industrial applications.

The VMX3045 is a small and light weight magnetron that can be easily installed in numerous platforms. The small form factor is ideally suited for mobile applications or in systems where space is at a premium.

The VMX3045 will mount directly into new or existing sockets and can be operated under various pulse and input conditions to accommodate a wide range of operating requirements.

FEATURES:

- 9.3 GHz
- Tunable +/- 30 MHz
- 400 kW peak output power
- 400 W average output power
- Long life >2000 hours

BENEFITS:

- High power
- Small size
- Ideally suited for mobile use

APPLICATIONS:

- Industrial linear accelerator

CPI EDB X-Band 400 kW Coaxial Pulsed Magnetron: VMX3045

Electrical Specifications

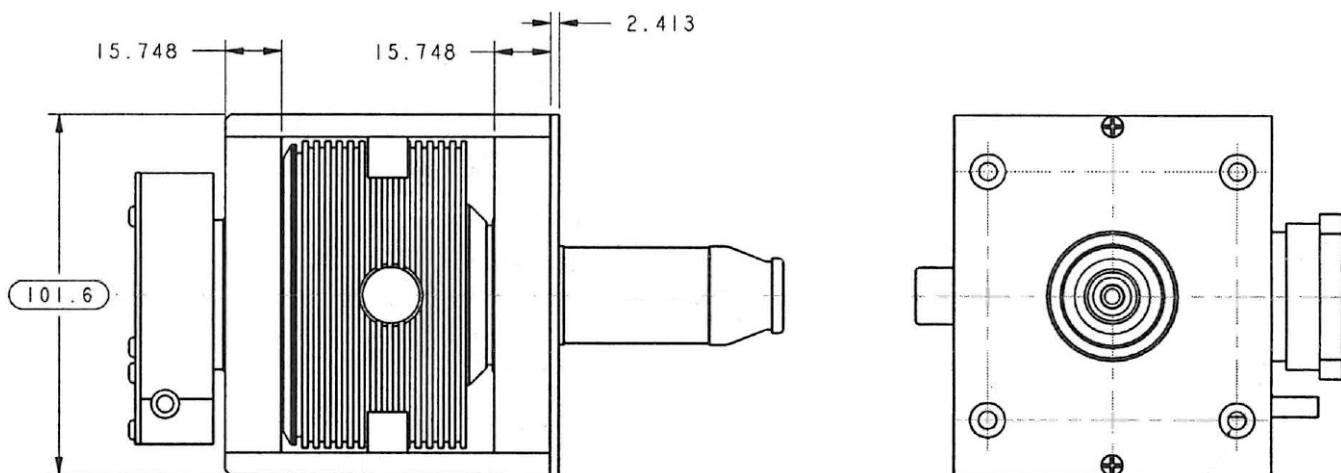
Frequency	9.3 GHz \pm 30MHz
Peak Power Output	400 kW
Average Power Output	400 W
Pulse Voltage	27 – 2.95 kV
Peak Anode Current	28 A
Average Anode Current	28 mA
Pulse Width	3.5 μ S, \pm 0.25 μ S
Duty Cycle	0.001
Maximum Filament Voltage	15 V
Maximum Filament Current	3.6 A
Minimum Warm -Up Time	150 S
Maximum Load VSWR	1.1:1

Mechanical and Environmental Specifications

Cooling	Forced air
Flow Rate	40 cfm
Body Temperature	-55°C to +140 °C
Mounting Position	Any
Support	Mounting Flange
Coupling	WR112 mates with UG -51/U choke flange
Tuning	10 turns, \sim 3 MHz per turn
Weight	11 lbs. (4.99 kg)

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

Contact us at ElectronDevices@cpiedb.com or call us at +1 978-922-6000.



Beverly Microwave Division
150 Sohler Road
Beverly, Massachusetts
USA 01915

tel +1 978-922-6000
email ElectronDevices@cpiedb.com
fax +1 978-922-8914
web www.cpi-edb.com

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

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