

## CPI Electron Device Business - 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 VMS1197B magnetron delivers high peak and average RF power for use in medical or industrial applications.

The VMS1197B 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 VMS1197B provides excellent frequency stability, low jitter and long life.

### FEATURES:

- Frequency 2.7 - 2.9 GHz
- Peak power output 750 kW min.
- Duty cycle 0.001
- Air cooled
- Mechanically tunable

### BENEFITS:

- Long life
- Exceptional frequency stability
- High power

### APPLICATIONS:

- Weather radars

# CPI EDB S-Band 750 kW Magnetron VMS1197B

## Electrical Specifications

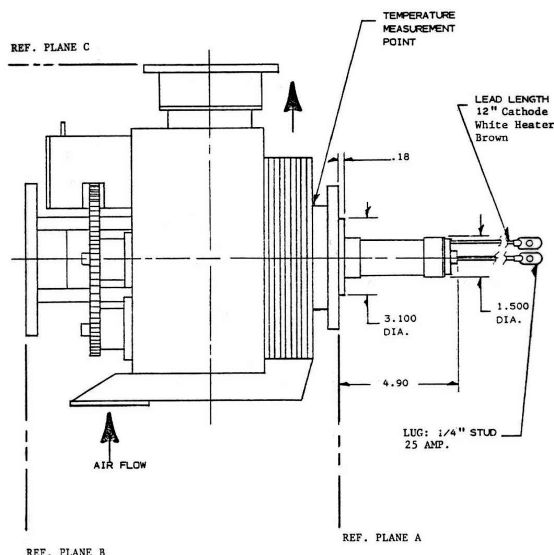
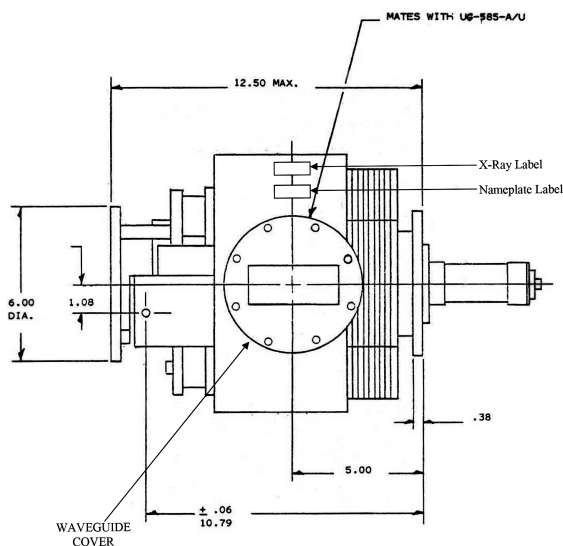
|                          |                |
|--------------------------|----------------|
| Frequency                | 2.7 – 2.9 GHz  |
| Peak power output        | 750 kW         |
| Average power output     | 750 W          |
| Pulse voltage            | 29.0 – 35.0 kV |
| Peak anode current       | 75 A           |
| Average anode current    | 39.4 mA        |
| Pulse width              | 4.0 $\mu$ S    |
| Duty cycle               | 0.001          |
| Maximum filament voltage | 11 V           |
| Maximum filament current | 22 A           |
| Minimum warm-up time     | 480 S          |
| Maximum load VSWR        | 1.3:1          |

## Mechanical and Environmental Specifications

|                          |   |
|--------------------------|---|
| Cooling                  | Forced air                              |
| Maximum body temperature | 120 °C                                  |
| Mounting position        | Any                                     |
| Support                  | Mounting flange                         |
| Coupling                 | WR 284 mates with UG585A/U choke flange |
| Weight                   | 75 lbs. (34.02 kg)                      |

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

Contact us at [ElectronDevices@cpiedb.com](mailto:ElectronDevices@cpiedb.com) or call us at +1 978-922-6000.



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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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