

## Communications & Power Industries Helix Traveling Wave Tube

### FEATURES:

- 750 W
- 17.3 -18.4 GHz
- Coaxial input
- Waveguide output
- Weight: 25 lbs. max
- Air cooled

### BENEFITS:

- High efficiency
  - Less prime power required (due to multiple stage collectors)
- PPM focusing

### APPLICATIONS:

- Satellite uplinks
- Communications
- Instrumentation
- DBS (Direct Broadcast System)

Custom configurations are also available. These variations in the performance and configuration include:

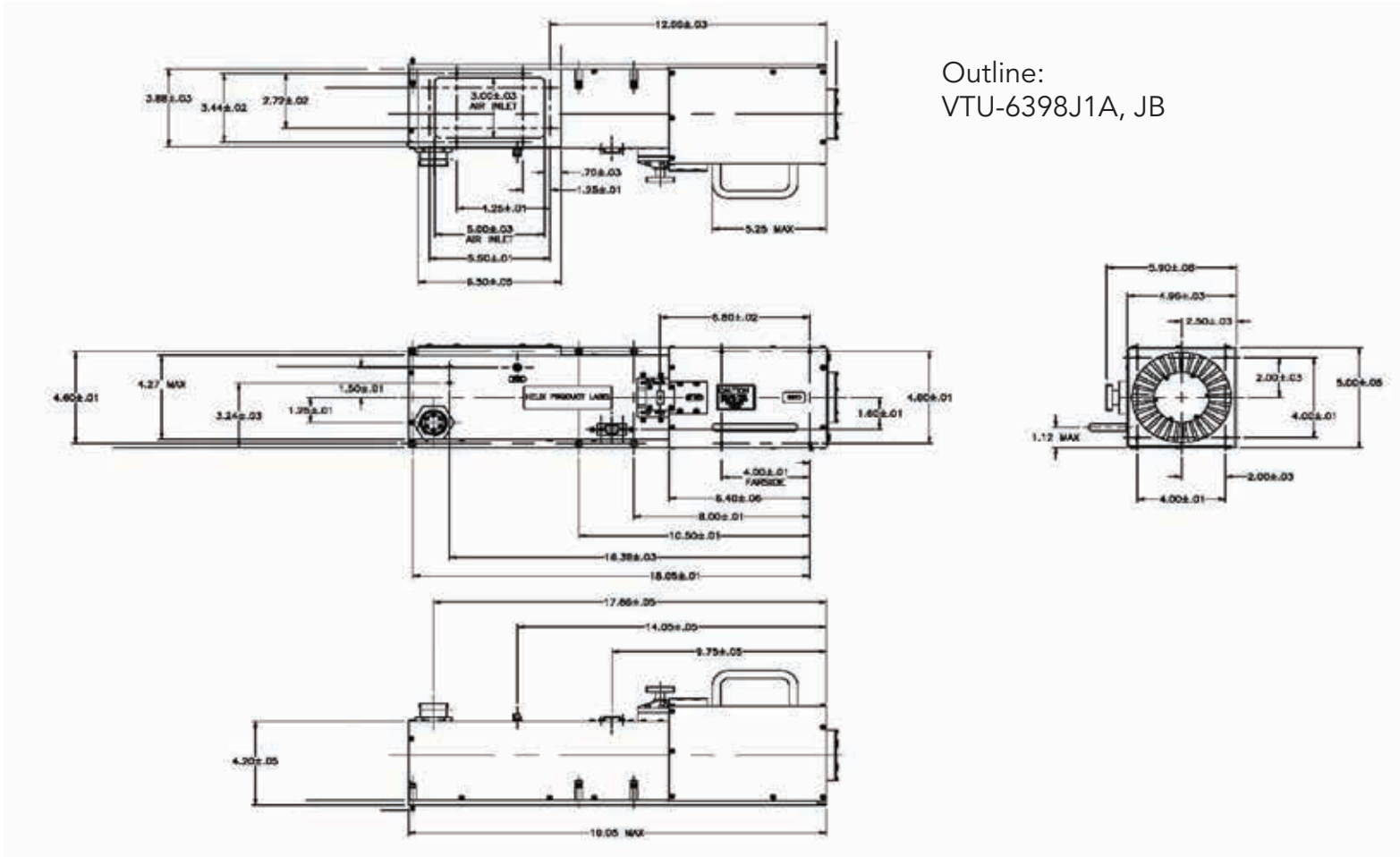
- mechanical configurations
- electrical and RF connections
- dual-stage depressed collector

|             | Frequency (GHz) | Power output (min) |
|-------------|-----------------|--------------------|
| VTU-6398J1A | 17.3 - 18.1     | 750 W Peak         |
| VTU-6398J1B | 17.3 - 18.4     | 750 W Peak         |

### Typical Operating Parameters

|                       | Minimum | Maximum | Typical | Units   |
|-----------------------|---------|---------|---------|---------|
| Heater voltage        | 6.1     | 6.4     | 6.3     | Vdc     |
| Heater surge current  | 0.8     | 1.6     | 1.4     | A       |
| Helix voltage         | 10.5    | 12.6    | 12.4    | kVdc    |
| Helix current         | ---     | ---     | ---     | mAdc    |
| Collector voltage 1   | 49.0    | 51.0    | 50.0    | %       |
| Collector current 1   | ---     | 375     | ---     | mAdc    |
| Collector voltage 2   | 25.0    | 27.0    | 26.0    | %       |
| Collector current 2   | ---     | 440     | ---     | mAdc    |
| Filament warm-up time | ---     | 3.0     | ---     | minutes |
| Drive power           | ---     | 22      | 20      | dBm     |
| Prime power           | ---     | 2350    | ---     | W       |
| Thermal temperature   | ---     | 1600    | ---     | W       |
| Load VSWR             | ---     | 1.25:1  | 1.15:1  | VSWR    |

# CPI CW Helix Traveling Wave Tube: VTU-6398J1A, JB



Outline:  
VTU-6398J1A, JB

With a history of producing high quality products, we can help you with your Helix TWT.  
**Contact us at [MPPMarketing@cpii.com](mailto:MPPMarketing@cpii.com) or call us at +1 650-846-2800.**

The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



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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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