# Communications & Power Industries Helix Traveling Wave Tube

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) |
|---|---|---|
| VTX-6388D1 | 7.9 - 8.4 | 2.25 kW |

## FEATURES:

- 2.25 kW
- 7.9 - 8.4 GHz
- PPM focusing
- Coaxial input
- Waveguide output
- Weight: 30 lbs. max
- Forced air cooled

## BENEFITS:

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

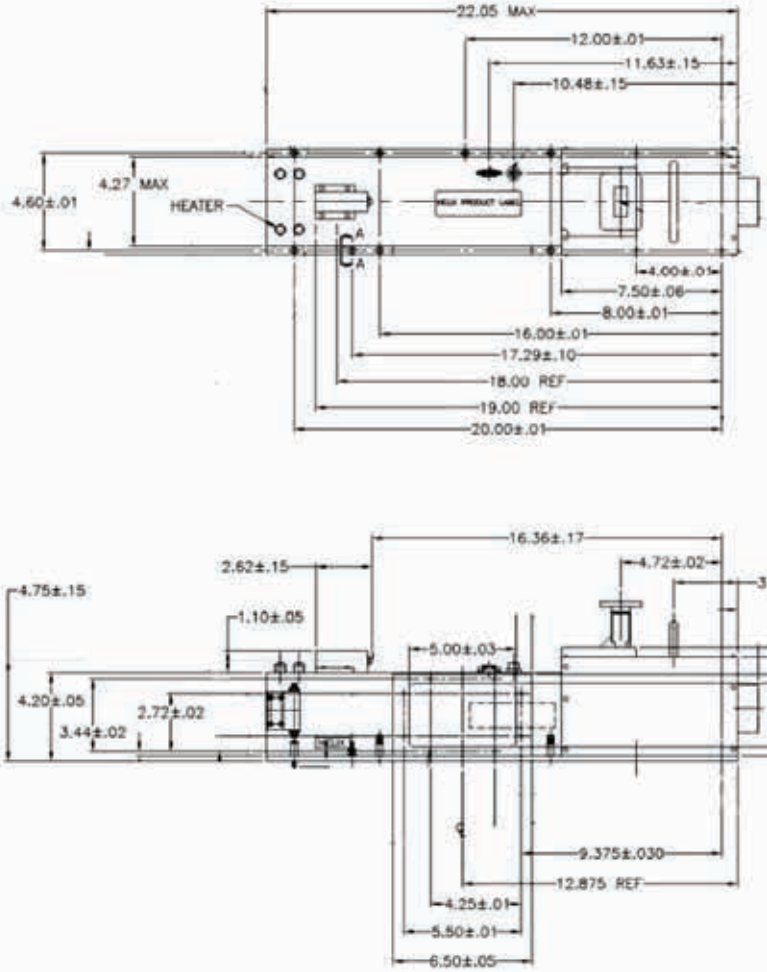
## APPLICATIONS:

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

## Typical Operating Parameters

| | Minimum | Maximum | Typical | Units |
|---|---|---|---|---|
| Heater voltage | 5.7 | 6.6 | --- | Vdc |
| Heater surge current | --- | 5.0 | --- | A |
| Helix voltage | 14.4 | 15.3 | --- | kVdc |
| Helix current | --- | 25 | --- | mAdc |
| Collector voltage 1 | 64% of Ew | 66% of Ew | --- | kVdc |
| Collector current 1 | --- | 500 | --- | mAdc |
| Collector voltage 2 | 19% of Ew | 21% of Ew | --- | kVdc |
| Collector current 2 | --- | 900 | --- | mAdc |
| Cathode warm-up time | 3.0 | --- | --- | minutes |
| Drive power | --- | --- | | mW |
| Collector temp | --- | 150 | --- | °C |
| Prime power | --- | 6000 | --- | W |
| Load VSWR | --- | 1.3:1 | --- | VSWR |

# CPI CW Helix Traveling Wave Tube: VTX-6388D1




Outline:
VTX-6388D1

With a history of producing high quality products, we can help you with your Helix TWT.
**Contact us at 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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7/20