

## 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)
VTU-6299F2	13.75 - 14.50	200 W
VTU-6299F3	12.75 - 14.50	200 W
VTU-6299F4	14.50 - 15.35	200 W

### FEATURES:

- 200 W
- 12.75 - 15.35 GHz
- Coaxial input
- Waveguide output
- Weight: 6 lbs. max
- Conduction cooled

### BENEFITS:

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

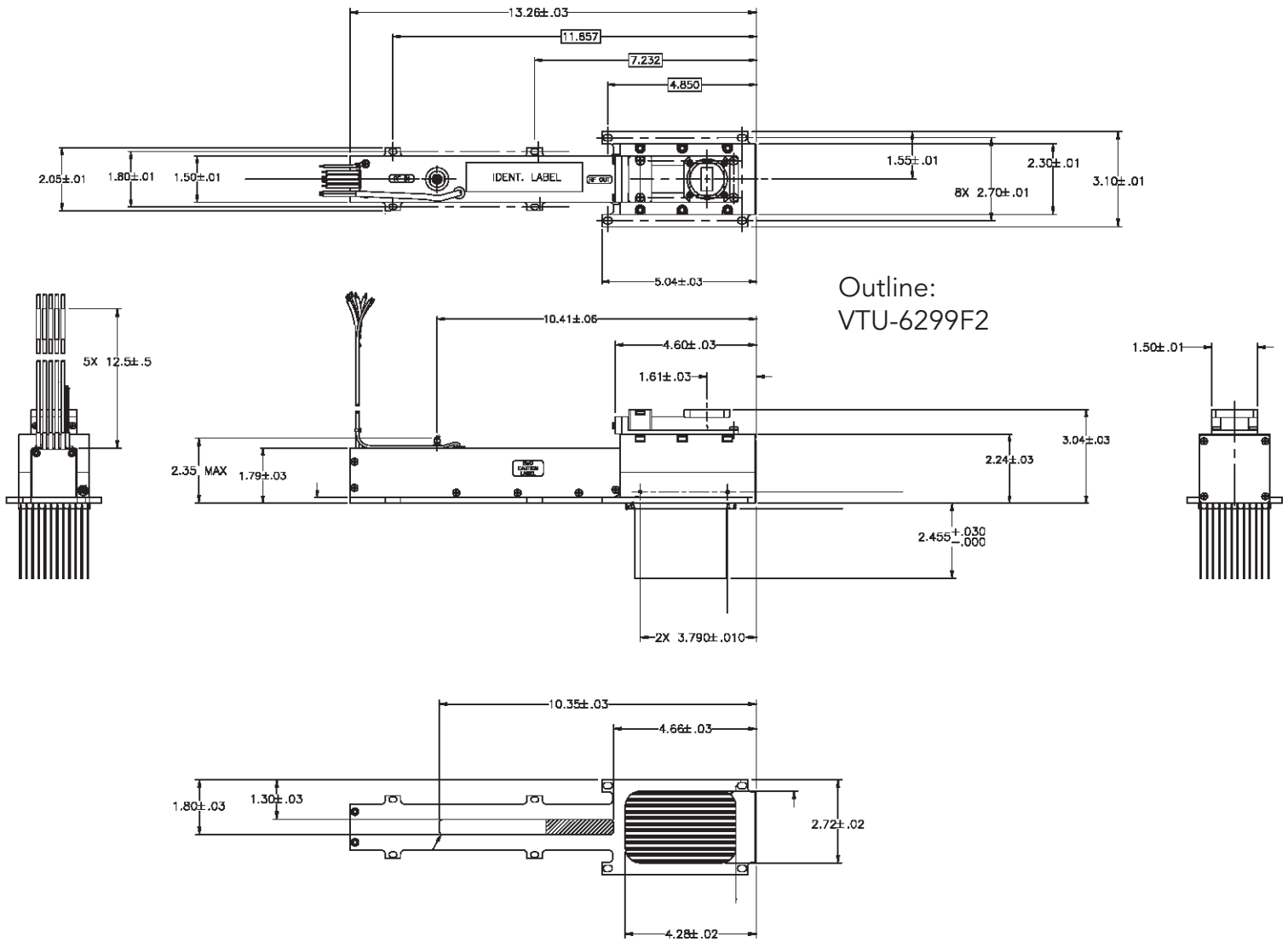
### APPLICATIONS:

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

### Typical Operating Parameters

	Minimum	Maximum	Typical	Units
Heater voltage	6.2	6.6	6.3	Vdc
Heater surge current	1.0	1.5	1.3	A
Helix voltage	6.8	7.4	7.1	kVdc
Helix current	---	8.0	4.0	mAdc
Collector voltage 1	49.0	51.0	50.0	%
Collector current 1	---	140	3 dc, 110 rf	mAdc
Collector voltage 2	17.0	19.0	18.0	%
Collector current 2	---	220	205 dc, 92 rf	mAdc
Cathode warm-up time	3.0	---	---	minutes
Drive power	---	10	---	dBm
Prime power	---	625	565	W
Thermal dissipation	---	300	---	W
Load VSWR	---	1.5:1	---	VSWR

# CPI CW Helix Traveling Wave Tube: VTU-6299F2, F3, F4



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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