## **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:**

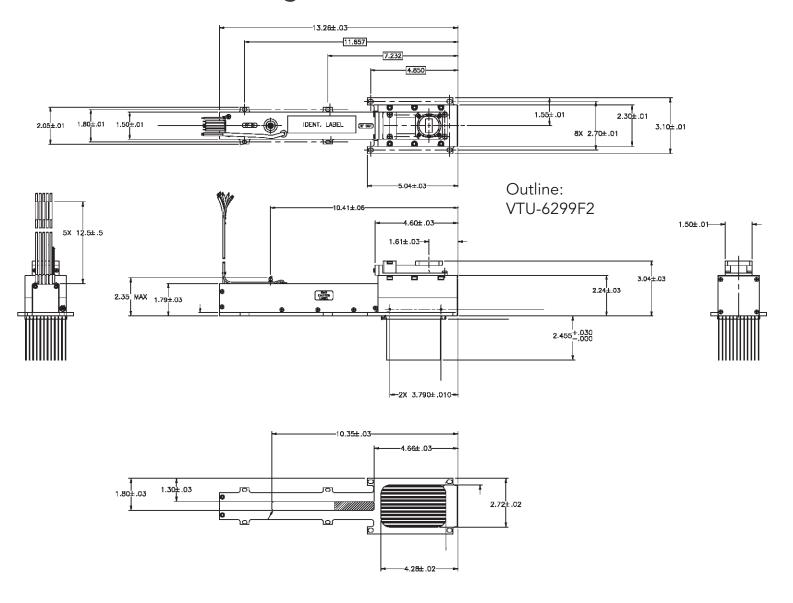
- Satellite uplinks
- Communications
- Instrumentation
- DBS (Direct Broadcast System)

**Typical Operating Parameters** 

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•	Minimum	Maximum	Typical	Units
Heater voltage	6.2	6.6	6.3	Vdc
Heater surge current	1.0	1.5	1.3	Α
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 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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