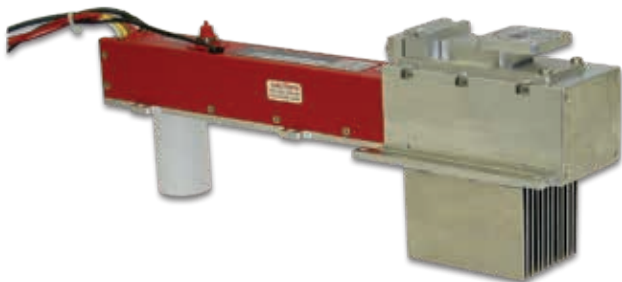## Communications & Power Industries Helix Traveling Wave Tube

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

Communications & Power Industries

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

Outline:
VTU-6299F2
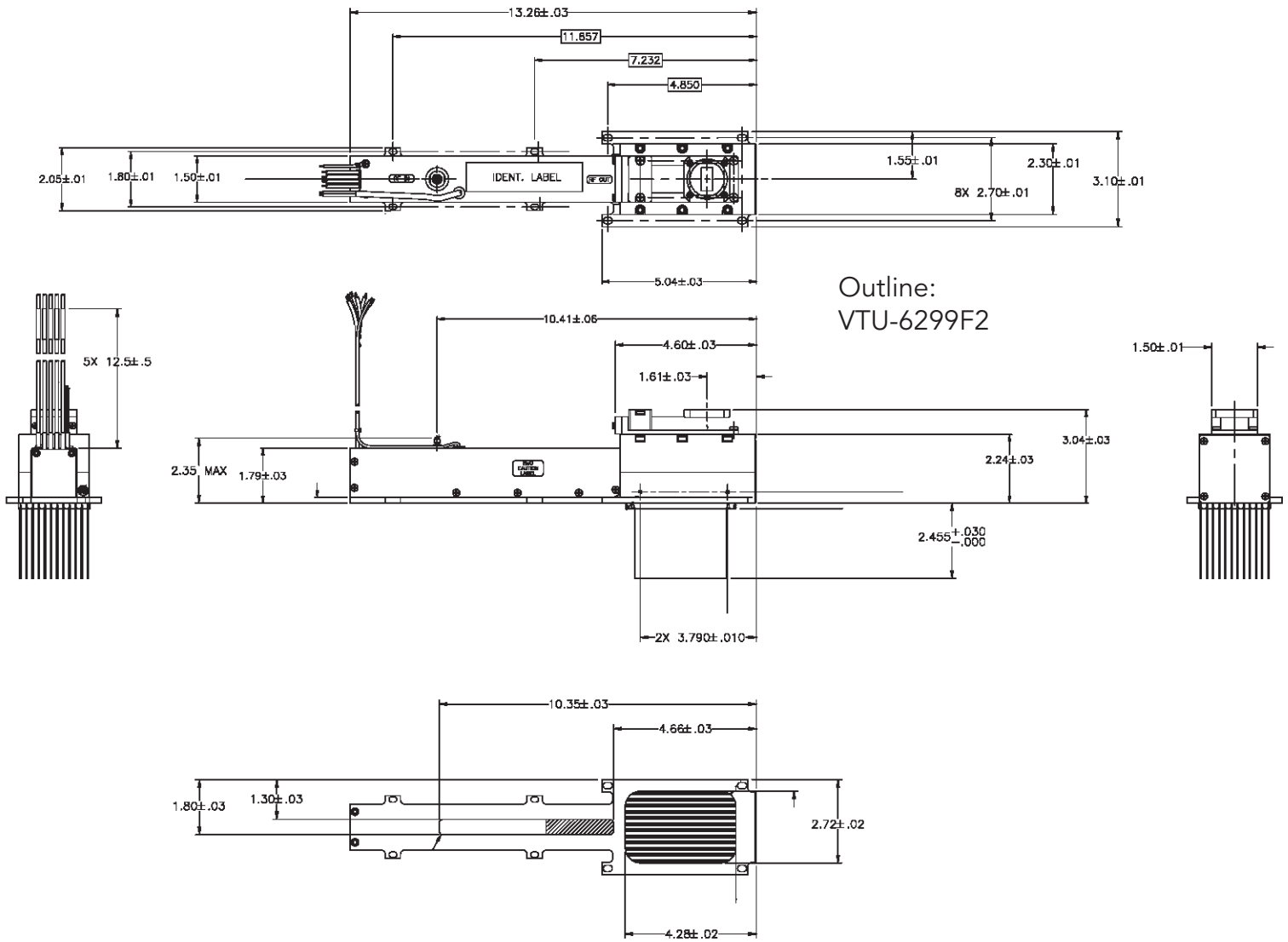
With a history of producing high quality products, we can help you with your Helix TWT.
Contact us at MPPMarketing@cpii.com or call us at +1 650-846-2800.

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