

## 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

### FEATURES:

- 750 W
- 12.75 - 14.50 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:

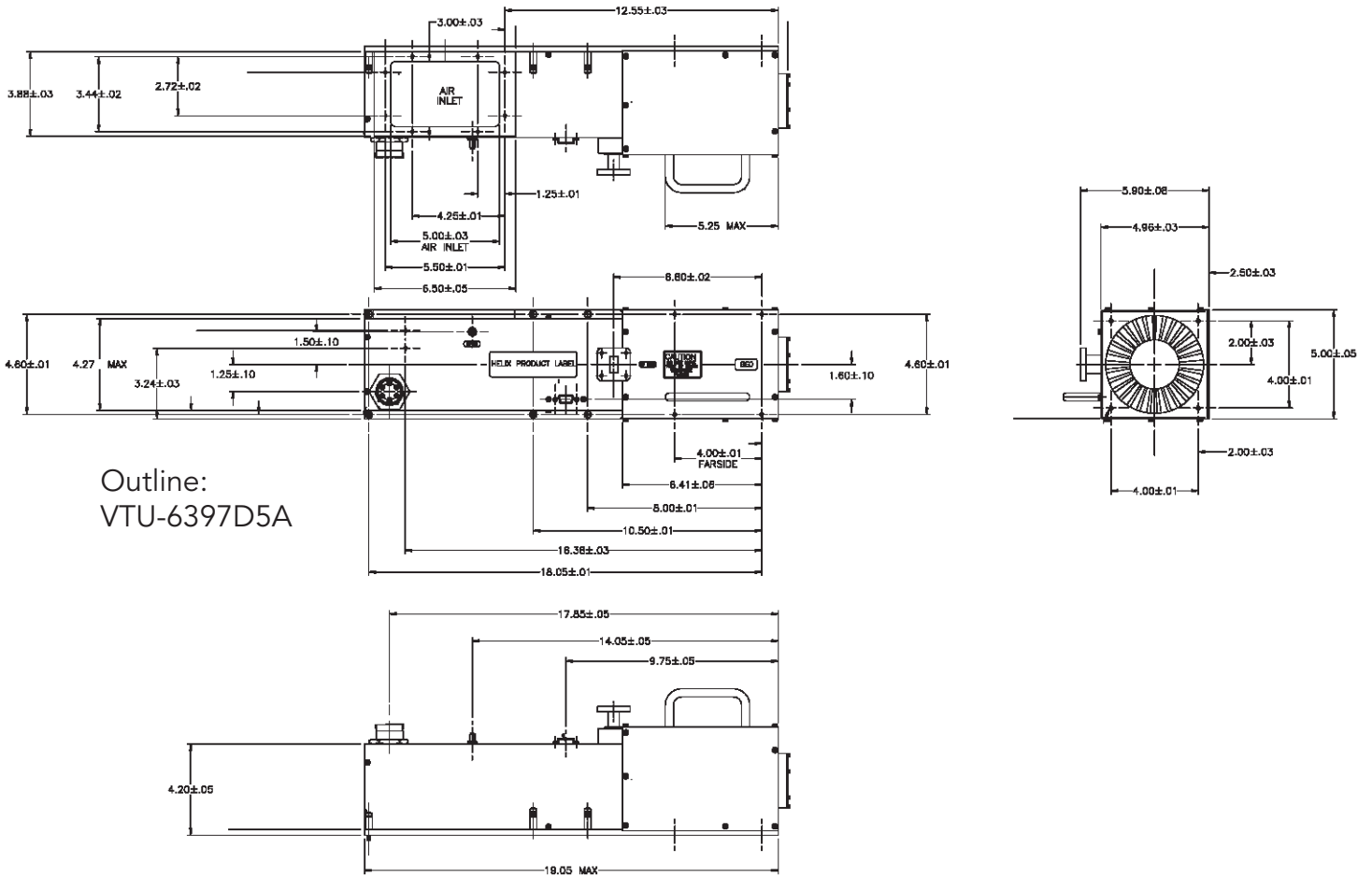
- Satellite uplinks
- Communications
- Instrumentation
- DBS (Direct Broadcast System)

	Frequency (GHz)	Power output (min)
VTU-6397D5A	12.75 - 14.50	750 W

### Typical Operating Parameters

	Minimum	Maximum	Typical	Units
Heater voltage	6.2	6.4	6.3	Vdc
Heater surge current	1.0	1.8	1.5	A
Helix voltage	11.6	12.5	12.4	kVdc
Helix current	---	10.0	3.0	mAdc
Collector voltage 1	51.0	53.0	52.0	%
Collector current 1	---	40 dc; 260 rf	17 dc; 230 rf	mAdc
Collector voltage 2	25.0	27.0	26.0	%
Collector current 2	---	400 dc; 180 rf	---	mAdc
Heater warm-up time	3.0	---	---	minutes
Drive power	---	18	10.0	dBm
Prime power	---	2300	2100	W
Thermal temperature	---	1900	1350	W
Load VSWR	---	1.2:1	---	VSWR

# CPI CW Helix Traveling Wave Tube: VTU-6397D5A



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