

## 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:

- 40 W
- 26.5 - 40.0 GHz
- CW and pulsed
- PPM focusing
- Waveguide input and output
- Any mounting position
- Weight: 7 lbs. max
- Conduction cooled

### BENEFITS:

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

### APPLICATIONS:

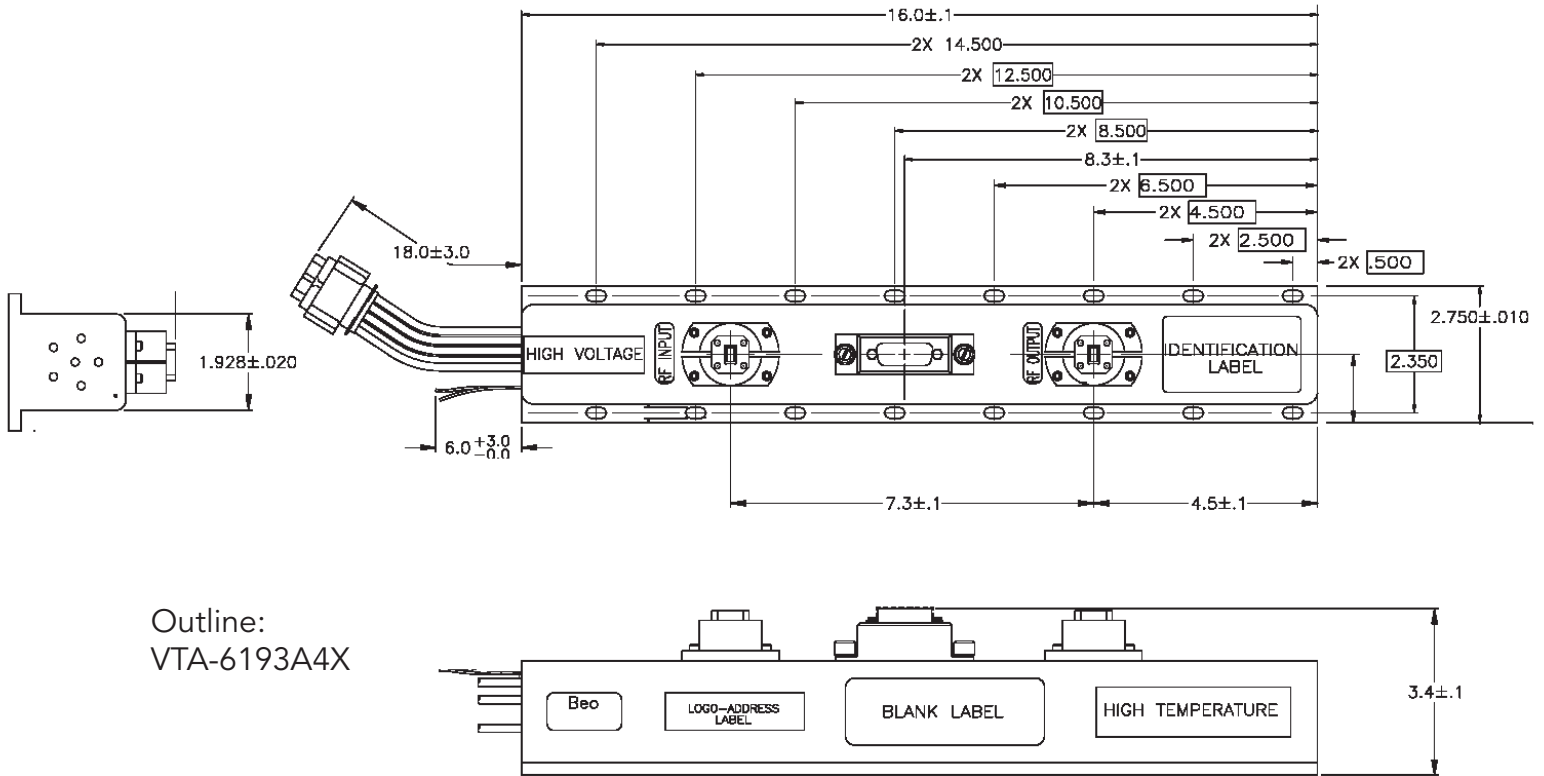
- Satellite uplinks
- Communications
- Instrumentation
- DBS (Direct Broadcast System)

	Frequency (GHz)	Power output (min)
VTA-6193A4X	26.5 - 40.0	40 W

### Typical Operating Parameters

	Minimum	Maximum	Typical	Units
Heater voltage	6.0	6.6	6.3	Vdc
Heater current	0.8	1.5	1.1	A
Heater surge current	---	3.0	<3.0	A
Helix voltage	11.5	13.2	12.6	kVdc
Helix current	---	4.0	<0.5	mAdc
Beam current	60	110	85	mAdc
Focus voltage ON	-50	-2	-45	V
Focus voltage OFF	-1000	-800	-850	V
Collector voltage	49% of Ew	41% of Ew	45% of Ew	kVdc
Collector current	---	110	85	mAdc
Anode voltage	+0	+500	+200	V
Anode current	---	1.0	---	mA
Prime power	---	675	---	W
Heater warm-up time	5	---	5	minutes
Load VSWR	---	1.7:1	1.25	VSWR

# CPI CW Helix Traveling Wave Tube: VTA-6193A4X



Outline:  
VTA-6193A4X

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.