

# VTU-5790C Pulsed Coupled Cavity TWT

The VTU-5790C pulsed- coupled cavity TWT covers 16.1 GHz to 16.7 GHz with 8 kW peak output power, 10 % duty cycle. This device has a non-intercepting grid pulsed and single stage depressed collector to achieve 46 dB gain.

Custom configurations are also available. These variations in the performance and configuration include: cooling method (affects average power level), mechanical configuration, electrical and RF connections, multiple stage depressed collector.

## Typical Operating Parameters

### Features

- 16.1 GHz to 16.7 GHz
- 8 kW PEAK OUTPUT POWER
- 10% DUTY CYCLE
- NON-INTERCEPTING GRID PULSED
- 46 dB GAIN
- SINGLE STAGE DEPRESSED COLLECTOR
- FORCED LIQUID COOLED
- PPM FOCUSED
- WR 62 WAVEGUIDE, INPUT AND OUTPUT

PARAMETER	MIN	MAX	UNIT
Cathode Voltage	-29	-31	kV
Cathode Current	---	3.0	a
Heater Voltage	9	11	V
Heater Current	---	4	A
Collector Voltage	20	22	kV
Grid Bias Voltage	-550	-450	V
Grid Pulse Voltage	300	450	A
RF Drive Power	---	0.5	W
Pulse Width	---	50	µsec
Duty Cycle	---	10.0	%
Cooling Flow Rate	3.0	---	lbm/mn
Pressure Drop	---	25	psi
Weight	---	18	lbs
Dimensions	---	3 X 3 X 15	inches

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.

For additional information on CPI MPP products contact:

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