

## VTX-5783E Pulsed Coupled Cavity TWT

The VTX-5783E pulsed-coupled cavity TWT covers 8.6 GHz to 9.5 GHz with 40 kW peak output power, 1.0 % duty cycle. This device has a non-intercepting grid pulsed and single stage depressed collector to achieve 48 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.

## **Features**

- 8.6 GHz to 9.5 GHz
- 40 kW PEAK OUTPUT POWER
- 1.0% DUTY CYCLE
- NON-INTERCEPTING GRID PULSED
- 48 dB GAIN
- SINGLE STAGE DEPRESSED COLLECTOR
- FORCED AIR COOLED
- PPM FOCUSED
- WR 90 WAVEGUIDE, INPUT AND OUTPUT

## Typical Operating Parameters

PARAMETER	MIN	MAX	UNITS
Cathode Voltage	-34	-31	kV
Cathode Current		9.0	а
Heater Voltage	9	11	V
Heater Current		6	Α
Collector Voltage	19	22	kV
Grid Bias Voltage	-450	-350	V
Grid Pulse Voltage	300	450	V
RF Drive Power		0.5	W
Pulse Width		50	μsec
Duty Cycle		1.0	%
Cooling Flow Rate	3.0		lbm/min
Pressure Drop		3.5	In H <sup>2</sup> O
Weight		16	lbs
Dimensions		5 X5X 18	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.