



# VTX-5786D Pulsed Coupled Cavity TWT

The VTX-5786D pulsed-coupled cavity TWT covers 8.6 GHz to 9.5 GHz with 25 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.

## Typical Operating Parameters

### Features

- 8.6 GHz to 9.5 GHz
- 25 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

| PARAMETER          | MIN  | MAX      | UNITS               |
|--------------------|------|----------|---------------------|
| Cathode Voltage    | -27  | -25      | kV                  |
| Cathode Current    | ---  | 7.0      | a                   |
| Heater Voltage     | 9    | 11       | V                   |
| Heater Current     | ---  | 4        | A                   |
| Collector Voltage  | 17   | 20       | kV                  |
| Grid Bias Voltage  | -400 | -300     | V                   |
| Grid Pulse Voltage | 300  | 450      | v                   |
| RF Drive Power     | ---  | 0.25     | W                   |
| Pulse Width        | ---  | 50       | μsec                |
| Duty Cycle         | ---  | 1.0      | %                   |
| Cooling Flow Rate  | 2.0  | ---      | lbm/min             |
| Pressure Drop      | ---  | 2.5      | 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.

For additional information on CPI MPP products contact:

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