

# VTS-5754G Pulsed Coupled Cavity TWT

The VTS-5754G pulsed-coupled cavity TWT covers 2.7 GHz to 3.1 GHz with 160 kW peak output power, up to 6% duty cycle. This device has a non-intercepting grid pulsed and single stage depressed collector to achieve 48 dB gain. This device is capable of parallel operation from a common HV power supply, phase tracking is better than +/- 20 degrees. The long life CD coated cathode is capable of pulse width to 200 micro seconds.



## Typical Operating Parameters

### Features

- 2.7 GHz to 3.1 GHz
- 160 kW PEAK OUTPUT POWER
- Up to 6% DUTY CYCLE
- NON-INTERCEPTING GRID PULSED
- 47 dB GAIN
- SINGLE STAGE DEPRESSED COLLECTOR
- FORCED LIQUID COOLED
- PPM FOCUSED
- COAXIAL TYPE-N- INPUT, CPR 284 WAVEGUIDE OUTPUT

| PARAMETER               | MIN  | MAX        | UNITS  |
|-------------------------|------|------------|--------|
| Cathode Voltage         | -46  | -43        | kV     |
| Cathode Current         | 14   | 17         | a      |
| Heater Voltage          | 8    | 11         | V      |
| Heater Current          | 6    | 11         | A      |
| Collector Voltage       | 27   | 30         | kV     |
| Grid Bias Voltage       | -700 | -600       | V      |
| Grid Pulse Voltage      | 600  | 800        | v      |
| RF Drive Power          | ---  | 2.0        | W      |
| Pulse Width             | ---  | 100        | μsec   |
| Duty Cycle              | ---  | 2.0        | %      |
| Collector Flow Rate     | ---  | 6.0        | Gpm    |
| Cooling Flow Rate       | ---  | 3.5        | Gpm    |
| Collector Pressure Drop | ---  | 25         | psig   |
| Body Pressure Drop      | ---  | 42         | psig   |
| Weight                  | ---  | 150        | lbs    |
| Dimensions              | ---  | 12 X15X 54 | 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:

CPI MPP, Coupled Cavity TWT Operation - 3120 Hansen Way, Palo Alto, CA 94303-0750  
 Phone: 650-846-3073, Fax: 650-857-1708, Email: [marketing@cpii.com](mailto:marketing@cpii.com), [www.cpii.com/mpp](http://www.cpii.com/mpp)