

VTS-5753 Pulsed Coupled Cavity TWT

The VTS-5753 pulsed-coupled cavity TWT covers 3.1 GHz to 3.5 GHz with 170 kW peak output power, up to 16% duty cycle. This solenoid focused device has a non-intercepting grid pulsed and single stage depressed collector to achieve 46 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 1 millisecond.



Features

- 3.1 GHz to 3.5 GHz
- 170 kW PEAK OUTPUT POWER
- Up to 16% DUTY CYCLE
- NON-INTERCEPTING GRID PULSED
- 46 dB GAIN
- SINGLE STAGE DEPRESSED COLLECTOR
- FORCED LIQUID COOLED
- SOLENOID FOCUSED
- COAXIAL TYPE-N- INPUT, CPR 284 WAVEGUIDE OUTPUT

Typical Operating Parameters

PARAMETER	MIN	MAX	UNITS
Cathode Voltage	-41	-43	kV
Cathode Current	15	18	a
Heater Voltage	8	11	V
Heater Current	6	11	A
Collector Voltage	33	38	kV
Grid Bias Voltage	-700	-600	V
Grid Pulse Voltage	600	800	v
RF Drive Power	---	6.0	W
Pulse Width	---	1000	μsec
Duty Cycle	---	16.0	%
Coolant Flow Rate	---	16.0	Gpm
Coolant Pressure Drop	---	75	psig
Solenoid Voltage	125	200	VDC
Solenoid Current	22	26	ADC
Weight	---	300	lbs
Dimensions	---	10 X16X 44	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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