

Specifications

The Traveling Wave Tube Microwave Power Amplifier shall meet or exceed the following Specifications.

Frequency of Operation: 3.1 – 3.5 GHz (minimum)

Output Power (watts): 150,000 (minimum)

Duty Cycle (%): greater than 15

Gain (dB): greater than 40

Pulse Width (milliseconds): greater than 1

Modulation: non-intercepting grid pulsed

RF Input connector: Type N, coaxial

RF Output connector: CPR 284 waveguide

Solenoid or permanent focus magnet included

Solenoid Voltage (volts DC): No greater than 250

Solenoid Current (amps): No greater than 26

Cathode Voltage (kilovolt DC): No greater than 45

Cathode Current (Amps): No greater than 20

Liquid cooled at no greater than 18 gallons per minute

Dimensions (inches): No greater than 12X20X45

Weight (pounds): No greater than 300

Operational Environment (degrees Celsius): +5 to + 50 C

Coolant inlet temperature degrees Celsius): +5 to +50

Altitude (feet): -1,000 to +12,000

Design Life (hours): > 20,000

