The Model 267 is a dual mode Pulse/CW TWT Amplifier which has been designed to operate TWT’s up to 80 watts in the 18 to 26.5 and 26.5 to 40 GHz frequency ranges. The RF output pulse is generated by the focus electrode (grid) pulse. CW operation may be selected by a discrete signal or by the application of +5VDC on the pulse input terminal. RF output pulse is controlled by the input video pulse.

Internal power supplies are DC-DC converter designs with fast loop response times so that output level variations are minimal for any PRF including a non-periodic or burst type PRF. The modular power supplies and grid pulse generator have very low ripple, with attendant low phase noise in the TWT Amplifier.

The modular design of the Model 267 provides convenient accessibility to all elements in the TWT amplifier. Plug-in PC boards are accessible through the front panel. The PC card cover contains a legend for PC card located test points and controls. High voltage modules are encapsulated, plug-in assemblies. There is no exposed high voltage.
Model 267 TWT Amplifier

SPECIFICATIONS

Duty Cycle . . . . . . . . . . . Up to 50% Pulse or CW
Pulse Width Range . . . . 50 ns to CW
PRF Range . . . . . . . . . . 100 kHz
RF Rise / Fall Time . . . 15 ns, Maximum
RF Pulse Droop . . . . . . < 0.1 dB, Maximum
Delay, Input to RF . . . . 200 ns, Maximum
Phase Noise . . . . . . . . . < ± 1° pk to pk
Amplitude Variation . . . 0.1 dB, Maximum
Spurious Outputs . . . . -50 dBc, Maximum
Input Pulse . . . . . . . . . 5 Volts into 50 ohms
Noise Figure . . . . . . . . 35 dB, Nominal
RF Connectors . . . . . . Waveguide
Primary Power . . . . . 120/220/240 VAC ± 10%, 50/60 Hz
Operating Temperature . 0 to 50°C
Weight . . . . . . . . . . . . 90 lbs, Nominal
Dimensions . . . . . . . . 8.75x19x28.5 (in.)

Standard Equipment

• Input Isolator
• RF Input - K, RF Output - WR-28
• Filament / Operate Time
• IEEE-488 Remote Interface
• Reverse Power Monitor
• Switchable Pulse or CW Mode of Operation

Options

• Driver Amplifier
• RF Sample Ports
• Forward/Reverse Power Meter
• RS-232/422 Remote Interface
• Other Primary Power
• Outdoor Enclosure
• RF Connectors on Front Panel