

## **VMU 1379 SPECIFICATIONS ELECTRON TUBE, COAXIAL MAGNETRON**

### **VMU 1379**

Tunable Frequency Range: 15.5 to 17.5 GHz

Peak Power Output: 100 kW Minimum

Pulse Width Range: 0.2 to 2.0 uSec minimum

Duty Cycle: 0.001 Minimum

Cooling: Forced Air

Filament Voltage: 12.6 VAC

Filament Current: 3.5 Amps Maximum

Pulse Voltage: 20 KV Maximum

Pulse Current: 24 Amps Maximum

Output Flange: Mates with UG-541/U, clearance instead of threaded holes)

Height above mounting plate: 6.0 inches Maximum

Height below Mounting Plate: 1.9 inches Maximum

#### Other

- 1) The magnetron shall be warranted for a minimum of 12 months
- 2) Cathode and heater leads shall be clearly identified.
- 3) Cathode and heater leads shall be nominally 12 inches in length.
- 4) The magnetron shall be manually tunable and equipped with a hand knob with a numeric scale.
- 5) The magnetron shall be capable of normal operation without electrical breakdown with the input bushing at normal atmospheric conditions (e.g. no oil bath)
- 6) All materials used shall be newly manufactured.
- 7) The tube shall be capable of normal operation prior to and immediately after exposure to 15 g impact shocks,  $11 \pm 1$  ms in duration. 18 shocks shall be delivered; 3 each per axis per direction.
- 8) The tube shall be capable of normal operation prior to and immediately after exposure to 25 and 50 Hz simple harmonic vibration. The tube shall be vibrated in all three axes for a period of one minute with double amplitude of 0.080 inches (total excursion).
- 9) The magnetron shall be capable of maintaining a pressure of 45 psia applied to the output window with no leaks evident.
- 10) One (1) day of on-site support shall be provided.  
Test specifications and procedures shall be provided for each magnetron
- 11) Magnetron tuning will be accomplished by manual dial, hand operated

# VMS 2071 SPECIFICATIONS

## ELECTRON TUBE, COAXIAL MAGNETRON

### VMS 2071

Tunable Frequency Range: 3100 to 3500 MHz

Peak Power Output: 880 kW Minimum

Pulse Width Range: 0.2 to 2.5 uSec minimum

Duty Cycle: .001 Minimum

Cooling: Forced Air

Filament Voltage: 87 VAC maximum warm up, 60 VAC operational

Filament Current: 3.5 Amps

Pulse Voltage: 42KV Maximum

Pulse Current: 70 Amps maximum

Output Flange: Mates with UG-54/U Choke, clearance instead of threaded holes)

Height above mounting plate: 14.25 inches Maximum

Height below Mounting Plate: 4.6 inches Maximum

#### Other

- 12) The magnetron shall be warranted for a minimum of 12 months
- 13) Cathode and heater leads shall be clearly identified.
- 14) Cathode and heater leads shall be nominally 12 inches in length.
- 15) The magnetron shall be manually tunable and equipped with a hand knob with a numeric scale.
- 16) The magnetron shall be capable of normal operation without electrical breakdown with the input bushing at normal atmospheric conditions (e.g. no oil bath)
- 17) All materials used shall be newly manufactured.
- 18) The tube shall be capable of normal operation prior to and immediately after exposure to 15 g impact shocks,  $11 \pm 1$  ms in duration. 18 shocks shall be delivered; 3 each per axis per direction.
- 19) The tube shall be capable of normal operation prior to and immediately after exposure to 25 and 50 Hz simple harmonic vibration. The tube shall be vibrated in all three axes for a period of one minute with double amplitude of 0.080 inches (total excursion).
- 20) The magnetron shall be capable of maintaining a pressure of 30 psia applied to the output window with no leaks evident.
- 21) One (1) day of on-site support shall be provided.  
Test specifications and procedures shall be provided for each magnetron
- 11) Magnetron tuning will be accomplished by manual dial, hand operated