MECHANICAL DATA

Envelope
Power Connector
RF Connector
Focusing
Cooling
Mounting Position
Tube Weight (Approx.)
Solenoid Weight (Approx.):
Military (Aluminum foil-wound)
Non-Military (Copper wire-wound)

MECHANICAL DATA

Metal Capsule
Winchester PM6p
Type N Jack
Electromagnetic
Forced Air
Any
1.5 lbs
13.5 lbs
39 lbs

ELECTRICAL DATA

Voltage
Current (at 6.3 V)
Minimum Preheat Time

HEATER CHARACTERISTICS

Voltage: 6.3 ± 10% V
Current (at 6.3 V): 1.8 - 2.7 A
Minimum Preheat Time: 3 Minutes

RATINGS (Absolute Maximum)

Collector Voltage with Respect to Helix
Grid 1 Voltage
Grid 2 Voltage
Helix, Grid 3 Voltage
Grid 2 Current
Cathode Current
Collector Seal Temperature

Collector Voltage with Respect to Helix: 300 Vdc
Grid 1 Voltage: ±125 Vdc
Grid 2 Voltage: 185 Vdc
Helix, Grid 3 Voltage: 2000 Vdc
Grid 2 Current: 5.5 mAadc
Cathode Current: 45 mAadc
Collector Seal Temperature: 200 °C

TYPICAL OPERATION

Conditions

Magnetic Focusing Field Density
Minimum Uniform Length
Grid 1 Voltage
Voltage to Gate-Off Oscillation
Collector Voltage with Respect to Helix
Grid 2 Voltage (Approx.)
Helix, Grid 3 Voltage (Approx.)

Magnetic Focusing Field Density: 490 Gausses
Minimum Uniform Length: 7 Inches
Grid 1 Voltage: 0 Vdc
Voltage to Gate-Off Oscillation: -100 Vdc
Collector Voltage with Respect to Helix: 150 Vdc
Grid 2 Voltage (Approx.): 100 Vdc
Helix, Grid 3 Voltage (Approx.): 220 - 1680 Vdc

Characteristics

Frequency
Grid 2 Current
Helix, Grid 3 Current
Cathode Current
Collector Current
RF Power Output

Frequency: 2 - 4 Gc
Grid 2 Current: - 5 mAadc
Helix, Grid 3 Current: - 20 mAadc
Cathode Current: - 42 mAadc
Collector Current: - 35 mAadc
RF Power Output: 10 - 1400 mW

CIRCUIT DESIGN INFORMATION

Grid 2 Voltage Range
Helix, Grid 3 Voltage Range

Grid 2 Voltage Range: 0 to 175 Vdc
Helix, Grid 3 Voltage Range: 150 to 1900 Vdc

from JEDEC release #1390A, April 10, 1961
NOTES:

1. Alternative connectors supplied on request.

2. In addition to the cooling requirements for the solenoid used with this tube it is recommended that at least 0.15 lbs/min of less than 100°F cooling air be directed into the collector end of this tube.

3. All voltages given are with respect to cathode except where otherwise specified. For safety, pin F should be operated at ground potential (see Note 6).

4. The quoted tube performance is for operation in a Sylvania-approved solenoid. Additional information will be supplied on request.

5. In typical operation the grid 2 voltage, with respect to cathode, remains fixed as a function of frequency. The appropriate value for an individual tube may be found by adjusting the grid 2 voltage to provide a specified value of cathode current when the tube is oscillating at 2 Gc. The specified value for cathode current, at 2 Gc, is supplied with each tube.

6. The inner conductor of the RF cable connects to the helix and hence has d-c continuity to pin F.

7. Ranges include values required as a result of initial spread in tube characteristics as well as those to accommodate changes throughout life.

8. Typical curves.