High Mu Triode and Sharp Cutoff Pentode

Construction: Miniature T-6½
Base: Button 9 Pin, E9-1
Basing: 9DX
Outline: 6-3
Maximum Diameter: 0.875 in.
Maximum Seated Height: 2.375 in.
Maximum Overall Height: 2.625 in.

**ELECTRICAL DATA**

**HEATER OPERATION**
- Heater Voltage: 6.3 Volts
- Heater Current: 600 Ma
- Heater Warm-up Time: 11 Seconds
- Maximum Heater-Cathode Voltage
  - Total DC and Peak: 200 Volts
  - DC: 100 Volts
  - Total DC and Peak: 200 Volts

**DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**

**Triode Section**
- Grid to Plate: 2.2 Pf
- Input: g to (h + Tk + Pk, g3, IS): 3.2 Pf
- Output: p to (h + Tk + Pk, g3, IS): 1.8 Pf

**Pentode Section**
- Grid No. 1 to Plate (Max.): 0.06 Pf
- Input: g1 to (h + Pk, g3, IS + g2): 10 Pf
- Output: p to (h + Pk, g3, IS + g2): 3.6 Pf

**Coupling**
- Pentode Plate to Triode Plate (Max.): 0.150 Pf
- Pentode Grid No. 1 to Triode Plate (Max.): 0.008 Pf

**RATINGS** (Design Maximum Rating System)

**Triode Section**
- Plate Voltage (Max.): 330 Volts
- Grid No. 2 Supply Voltage (Max.): 330 Volts
- Grid No. 2 Voltage: See Rating Chart (Gen. Info. Sec.)
- Plate Dissipation (Max.): 1.1 Watts
- Grid No. 2 Dissipation (Up to Ec2 = 165 V) (Max.): 1.1 Watt
- Above 165 V: See Rating Chart (Gen. Info. Sec.)
- Positive Grid No. 1 Voltage (Max.): 4 Volts
- Negative Grid No. 1 Voltage (Max.): 55 Volts
- Grid No. 1 Current: 8 Ma
- Grid No. 1 Circuit Resistance
  - Fixed Bias (Max.): 0.5 Megohm
  - Self Bias (Max.): 1.0 Megohm

**Pentode Section**
- Plate Voltage: 100 Volts
- Grid No. 2 Voltage: 150 Volts
- Grid No. 1 Voltage: 2.5 Volts
- Plate Current: 20 Ma
- Grid No. 2 Current: 5.0 Ma
- Grid No. 1 Current: 0 Ma
- Transconductance: 11,000 µmhos
- Amplification Factor: 200,000 Ohms
- Plate Resistance (Approx.): 8 Volts
- Ec for Ib = 20 µA (Approx.): 17,500 Ohms

**CHARACTERISTICS AND TYPICAL OPERATION**

**Class A1 Amplifier**

**Triode Section**
- Plate Voltage: 200 Volts
- Grid No. 2 Voltage: 40 Volts
- Grid No. 1 Voltage: -2 Volts
- Plate Current: 4.0 Ma
- Grid No. 2 Current: 11 Ma
- Grid No. 1 Current: 2.7 Ma
- Transconductance: 40,000 µmhos
- Amplification Factor: 70
- Plate Resistance (Approx.): 17,500 Ohms
- Ec for Ib = 20 µA: 10,000 Ohms

**Pentode Section**
- Plate Voltage: 100 Volts
- Grid No. 2 Voltage: 150 Volts
- Grid No. 1 Voltage: 2.5 Volts
- Plate Current: 20 Ma
- Grid No. 2 Current: 5.0 Ma
- Grid No. 1 Current: 0 Ma
- Transconductance: 11,000 µmhos
- Amplification Factor: 200,000 Ohms
- Plate Resistance (Approx.): 8 Volts
- Ec for Ib = 20 µA: 17,500 Ohms