

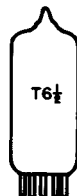
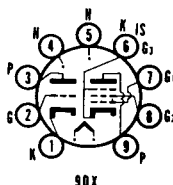
Color Television Type

**VIDEO AMPLIFIER (T)
GENERAL PURPOSE AMPLIFIER (P)**

6LF8

**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 | |
| Heater Negative with Respect to Cathode | |
| Total DC and Peak..... | 200 Volts |
| Heater Positive with Respect to Cathode | |
| 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 | Pentode Section |
|--|------------------------------------|------------------------|
| Plate Voltage (Max.) | 330 | 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 | 3.75 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 | 0 Volts |
| Negative Grid No. 1 Voltage (Max.) | 55 | 55 Volts |
| Grid No. 1 Current | 8 | 0 Ma |
| Grid No. 1 Circuit Resistance | | |
| Fixed Bias (Max.) | 0.5 | 0.25 Megohm |
| Self Bias (Max.) | 1.0 | 1.0 Megohm |

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

| | Triode Section | | Pentode Section |
|-----------------------------------|-----------------------|--------|------------------------|
| Plate Voltage | 200 | 40 | 100 Volts |
| Grid No. 2 Voltage | — | — | 150 Volts |
| Grid No. 1 Voltage | -2 | 3 | 2.5 Volts |
| Plate Current | 4.0 | 11 | 20 Ma |
| Grid No. 2 Current | — | — | 5.0 Ma |
| Grid No. 1 Current | 0 | 2.7 | 0 Ma |
| Transconductance | 4000 | 4000 | 11,000 μmhos |
| Amplification Factor | 70 | 40 | — |
| Plate Resistance (Approx.) | 17,500 | 10,000 | 200,000 Ohms |
| Ec for Ib = 20 μa (Approx.) | -5 | — | 8 Volts |

INSTANTANEOUS PLATE KNEE CHARACTERISTICS

Eb = 65 V, Ec2 = 150 V, Ec1 = 0 V
Ib = 60 Ma, Ic2 = 20 Ma