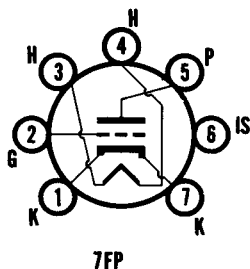




**SYLVANIA TYPE 6FY5
3FY5
2FY5**



VHF TRIODE

MECHANICAL DATA

| | |
|------------------------|------------------------------|
| Bulb..... | T-5 $\frac{1}{2}$ |
| Base..... | E7-1, Miniature Button 7-Pin |
| Outline..... | 5-2 |
| Basing..... | 7FP |
| Cathode..... | Coated Unipotential |
| Mounting Position..... | Any |

ELECTRICAL DATA

HEATER CHARACTERISTICS

| | 2FY5 | 3FY5 | 6FY5 |
|----------------------------------------|------|------|----------------|
| Heater Voltage..... | 2.4 | 3.1 | 6.3 Volts |
| Heater Current..... | 600 | 450 | 200 |
| Heater Warm-up Time ¹ | 11 | 11 | Seconds |
| Heater-Cathode Voltage | | | |
| Heater Neg. with Respect to Cathode | | | |
| Total D C and Peak..... | 100 | 100 | 100 Volts Max. |
| Heater Pos. with Respect to Cathode | | | |
| Total D C and Peak..... | 100 | 100 | 100 Volts Max. |

DIRECT INTERELECTRODE CAPACITANCES

| | Shielded | Unshielded |
|------------------------|----------|----------------------------|
| Grid to Plate..... | 0.48 | 0.5 $\mu\mu\text{f}$ Max. |
| Input..... | 4.75 | 4.75 $\mu\mu\text{f}$ |
| Output..... | 4.3 | 3.3 $\mu\mu\text{f}$ |
| Grid to Heater..... | 0.28 | 0.28 $\mu\mu\text{f}$ Max. |
| Plate to Cathode..... | 0.21 | 0.25 $\mu\mu\text{f}$ |
| Grid to Heater..... | 3.2 | 3.2 $\mu\mu\text{f}$ |
| Cathode to Heater..... | 2.5 | 2.5 $\mu\mu\text{f}$ |

RATINGS (Absolute Maximum Values)

| | |
|----------------------------------------|------------------|
| Plate Voltage..... | 200 Volts Max. |
| Plate Dissipation..... | 2.2 Watts Max. |
| Cathode Current..... | 20 Ma Max. |
| Negative Grid Voltage..... | 50 Volts Max. |
| Grid Circuit Resistance..... | 1.0 Megohms Max. |
| Cathode Heater Circuit Resistance..... | 20,000 Ohms Max. |

CHARACTERISTICS AND TYPICAL OPERATIONS

Class A1 Amplifier

| | | | | |
|---------------------------|------|-----|------|-------------------------|
| Plate Voltage..... | 135 | 135 | 135 | 135 Volts |
| Grid Voltage..... | -4.5 | -5 | -3.1 | -1.0 Volts |
| Plate Current..... | 0.1 | — | — | 11 Ma |
| Transconductance..... | — | 125 | 625 | 13,000 μmhos |
| Amplification Factor..... | — | — | — | 70 |

NOTES:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.

APPLICATION

The Sylvania Types 6FY5, 3FY5, and 2FY5 are remote cutoff triodes designed for use as VHF RF amplifiers. Features of the design include: A partial shield between the grid and plate which lowers the capacitance between these two elements and promotes ease of neutralization; low input capacitance; and higher input impedance by virtue of dual cathode leads.