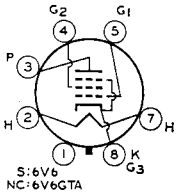


7AC

# 6V6
# 6V6GTA
12V6GT

## BEAM POWER TUBE

Metal type 6V6 and glass octal type 6V6GTA are used as output amplifiers in automobile, battery-operated, and other receivers in which reduced plate-current drain is desirable. **Outlines section,** 2B and 13D, respectively; require octal socket. These tubes are equivalent in performance to type 6AQ5A. Refer to type 6AQ5A for average plate characteristic curves. Type 12V6GT is identical with type 6V6GTA except for heater ratings.

| | 6V6 | 6V6GTA | 12V6GT | |
|---|---|---|---|---|
| Heater Voltage (ac/dc) | 6.3 | 6.3 | 12.6 | volts |
| Heater Current | 0.45 | 0.45 | 0.225 | ampere |
| Heater Warm-up Time (Average) | — | 11 | — | seconds |
| Heater-Cathode Voltage: | | | | |
| Peak value | ±200 max | ±200 max | ±200 max | volts |
| Average value | 100 max | 100 max | 100 max | volts |
| | | 6V6° | 6V6GTA | |
| Direct Interelectrode Capacitances (Approx.): | | | | |
| Grid No.1 to Plate | | 0.3 | 0.7 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | | 10 | 9 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | | 11 | 7.5 | pF |

° With shell connected to cathode.

## Class $A_1$ Amplifier

**MAXIMUM RATINGS** (Design-Maximum Values)

| | | |
|---|---|---|
| Plate Voltage | 350 | volts |
| Grid-No.2 (Screen-Grid) Voltage | 315 | volts |
| Plate Dissipation | 14 | watts |
| Grid-No.2 Input | 2.2 | watts |

**TYPICAL OPERATION**

| | | | | |
|---|---|---|---|---|
| Plate Voltage | 180 | 250 | 315 | volts |
| Grid-No.2 Voltage | 180 | 250 | 225 | volts |
| Grid-No.1 (Control-Grid) Voltage | —8.5 | —12.5 | —13 | volts |
| Peak AF Grid-No.1 Voltage | 8.5 | 12.5 | 13 | volts |
| Zero-Signal Plate Current | 29 | 45 | 34 | mA |
| Maximum-Signal Plate Current | 30 | 47 | 35 | mA |
| Zero-Signal Grid-No.2 Current | 3 | 4.5 | 2.2 | mA |
| Maximum-Signal Grid-No.2 Current | 4 | 7 | 6 | mA |
| Plate Resistance (Approx.) | 50000 | 50000 | 80000 | ohms |
| Transconductance | 3700 | 4100 | 3750 | μmhos |
| Load Resistance | 5500 | 5000 | 8500 | ohms |
| Total Harmonic Distortion | 8 | 8 | 12 | per cent |
| Maximum-Signal Power Output | 2 | 4.5 | 5.5 | watts |

**CHARACTERISTICS** (Triode Connection)▲

| | | |
|---|---|---|
| Plate Voltage | 250 | volts |
| Grid-No.1 (Control-Grid) Voltage | —12.5 | volts |
| Amplification Factor | 9.8 | |
| Plate Resistance (Approx.) | 1960 | ohms |
| Transconductance | 5000 | μmhos |
| Plate Current | 49.5 | mA |
| Grid-No.1 Voltage (Approx.) for plate current of 0.5 mA | —36 | volts |

▲ Grid No.2 connected to plate.

## Push-Pull Class $A_1$ Amplifier

**MAXIMUM RATINGS** (Same as for Class $A_1$ Amplifier)

**TYPICAL OPERATION** (Values are for two tubes)

| | | | |
|---|---|---|---|
| Plate Voltage | 250 | 285 | volts |
| Grid-No.2 Voltage | 250 | 285 | volts |
| Grid-No.1 (Control-Grid) Voltage | —15 | —19 | volts |
| Peak AF Grid-No.1-to-Grid-No.1 Voltage | 30 | 38 | volts |
| Zero-Signal Plate Current | 70 | 70 | mA |
| Maximum-Signal Plate Current | 79 | 92 | mA |
| Zero-Signal Grid-No.2 Current | 5 | 4 | mA |
| Maximum-Signal Grid-No.2 Current | 13 | 13.5 | mA |

| | | | |
|---|---|---|---|
| Effective Load Resistance (Plate-to-Plate) | 10000 | 8000 | ohms |
| Total Harmonic Distortion | 5 | 3.5 | per cent |
| Maximum-Signal Power Output | 10 | 14 | watts |
| **MAXIMUM CIRCUIT VALUES** | | | |
| Grid-No.1-Circuit Resistance: | | | |
| For fixed-bias operation | | 0.1 | megohm |
| For cathode-bias operation | | 0.5 | megohm |

### Vertical-Deflection Amplifier (Triode Connection)▲

**For operation in a 525-line, 30-frame system**

| | | |
|---|---|---|
| **MAXIMUM RATINGS** (Design-Maximum Values) | | |
| DC Plate Voltage | 350 | volts |
| Peak Positive-Pulse Plate Voltage# | 1200 | volts |
| Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage | 275 | volts |
| Peak Cathode Current | 115 | mA |
| Average Cathode Current | 40 | mA |
| Plate Dissipation | 10 | watts |
| **MAXIMUM CIRCUIT VALUE** | | |
| Grid-No.1-Circuit Resistance, for cathode-bias operation | 2.2 | megohms |

▲ Grid No.2 connected to plate.
# Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

**6V6GT** Refer to chart at end of section.

**6V6GTY** Refer to chart at end of section.

**6V7G** Refer to chart at end of section.

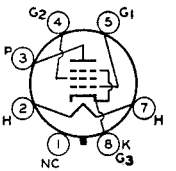
**6W4GT** Refer to chart at end of section.

# 6W6GT

**12W6GT**

## BEAM POWER TUBE

Glass octal type used in the audio output stage of radio and color and black-and-white television receivers. Triode-connected, it is used as a vertical-deflection amplifier in television receivers. **Outlines section,** 13D; requires octal socket. This type may be supplied with pin No.1 omitted. Type 12W6GT is identical with type 6W6GT except for heater ratings.




7AC

| | 6W6GT | 12W6GT | |
|---|---|---|---|
| Heater Voltage (ac/dc) | 6.3 | 12.6 | volts |
| Heater Current | 1.2 | 0.6 | ampere |
| Heater Warm-up Time (Average) | — | 11 | seconds |
| Heater-Cathode Voltage: | | | |
| Peak value | ±200 max | +200 max<br>−300 max | volts |
| Average value | 100 max | +100 max<br>−200 max | volts |
| Direct Interelectrode Capacitances (Approx.): | | | |
| Grid No.1 to Plate | | 0.8 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | | 15 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | | 9 | pF |

### Class $A_1$ Amplifier

| | | | |
|---|---|---|---|
| **MAXIMUM RATINGS** (Design-Maximum Values) | | | |
| Plate Voltage | | 330 | volts |
| Grid-No.2 (Screen-Grid) Voltage | | 165 | volts |
| Plate Dissipation | | 12 | watts |
| Grid-No.2 Input | | 1.35 | watts |
| **TYPICAL OPERATION** | | | |
| Plate Supply Voltage | 110 | 200 | volts |
| Grid-No.2 Supply Voltage | 110 | 125 | volts |
| Grid-No.1 (Control-Grid) Voltage | −7.5 | — | volts |
| Cathode-Bias Resistor | — | 180 | ohms |
| Peak AF Grid-No.1 Voltage | 7.5 | 8.5 | volts |
| Zero-Signal Plate Current | 49 | 46 | mA |
| Maximum-Signal Plate Current | 50 | 47 | mA |
| Zero-Signal Grid-No.2 Current | 4 | 2.2 | mA |
| Maximum-Signal Grid-No.2 Current | 10 | 8.5 | mA |
| Plate Resistance (Approx.) | 13000 | 28000 | ohms |

| | | | |
|---|---|---|---|
| Transconductance | 8000 | 8000 | μmhos |
| Load Resistance | 2000 | 4000 | ohms |
| Total Harmonic Distortion (Approx.) | 10 | 10 | per cent |
| Maximum-Signal Power Output | 2.1 | 3.8 | watts |
| **CHARACTERISTICS** (Triode Connection)* | | | |
| Plate Voltage | | 225 | volts |
| Grid-No.1 Voltage | | —30 | volts |
| Amplification Factor | | 6.2 | |
| Plate Resistance (Approx.) | | 1600 | ohms |
| Transconductance | | 3800 | μmhos |
| Plate Current | | 22 | mA |
| Grid No.1 Voltage (Approx.) for plate current of 0.5 mA | | —42 | volts |
| **MAXIMUM CIRCUIT VALUES** | | | |
| Grid-No.1 Circuit Resistance: | | | |
| For fixed-bias operation | | 0.1 | megohm |
| For cathode-bias operation | | 0.5 | megohm |

* Grid No.2 connected to plate.

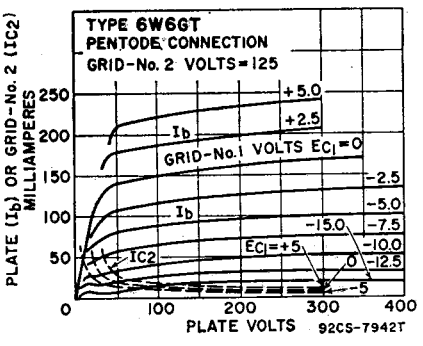
## Vertical-Deflection Amplifier

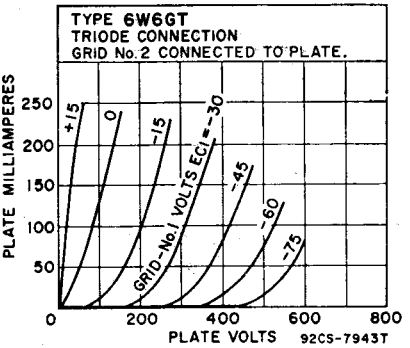
**For operation in a 525-line, 30-frame system**

| **MAXIMUM RATINGS** (Design-Maximum Values) | Triode Connection* | Pentode Connection | |
|---|---|---|---|
| DC Plate Voltage | 330 | 330 | volts |
| Peak Positive-Pulse Plate Voltage# | 1200 | 1500 | volts |
| DC Grid No.2 (Screen-Grid) Voltage | — | 165 | volts |
| Peak Negative-Pulse Grid-No.1 Voltage | 275 | 275 | volts |
| Peak Cathode Current | 195 | 195 | mA |
| Average Cathode Current | 65 | 65 | mA |
| Plate Dissipation | 8.5 | 8 | watts |
| Grid-No.2 Input | — | 1.2 | watts |
| **MAXIMUM CIRCUIT VALUE** | | | |
| Grid-No.1-Circuit Resistance, for cathode-bias operation | 2.2 | 2.2 | megohms |

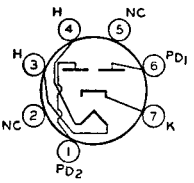
* Grid No.2 connected to plate.

# Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).




Refer to chart at end of section. **6W7G**




**5BS**

## FULL-WAVE VACUUM RECTIFIER

# 6X4

**12X4**

Miniature type used in power supply of automobile and ac-operated radio receivers. Equivalent in performance to larger type 6X5GT. **Outlines section,** 5D; requires miniature 7-contact socket. This tube, like other power-handling tubes, should be adequately ventilated. For discussion of Rating Chart and Operation Characteristics, refer to **Interpretation of Tube Data.** Type 12X4 is identical with type 6X4 except for heater ratings.

| | 6X4 | 12X4 | |
|---|---|---|---|
| Heater Voltage (ac/dc) | 6.3▲ | 12.6 | volts |
| Heater Current | 0.6 | 0.3 | ampere |
| Heater-Cathode Voltage: | | | |
| Peak value | +200, —450 max | | volts |
| Average value | 100 max | | volts |

▲ When the heater is operated from a 3-cell (nominal-6-volt) storage-battery source, the permissible heater-voltage range is from 5 to 8 volts.

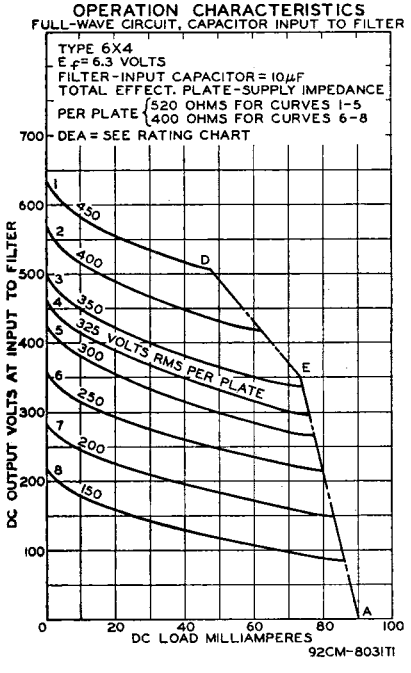
## Full-Wave Rectifier

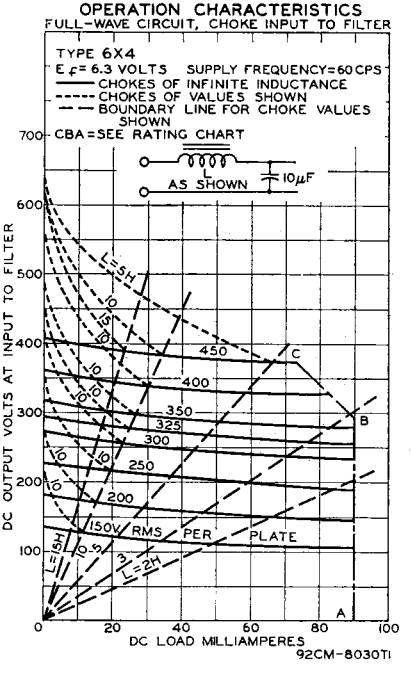
**MAXIMUM RATINGS** (Design-Maximum Values)

| | | |
|---|---|---|
| Peak Inverse Plate Voltage | 1250 | volts |
| Steady-State Peak Plate Current (Per Plate) | 245 | mA |
| AC Plate Supply Voltage (Per Plate, rms) | See Rating Chart | |
| DC Output Voltage (At filter input)† | 350 | volts |
| Average Output Current (Each plate)† | 45 | mA |
| Hot-Switching Transient Plate Current | # | |

† This rating applies when the 6X4 is used in vibrator operation with a minimum duty cycle of 75 per cent.

# If hot-switching is regularly required in operation, the use of choke-input circuits is recommended. Such circuits limit the hot-switching current to a value no higher than that of the peak plate current. When capacitor-input circuits are used, a maximum peak current value per plate of 1.1 amperes during the initial cycles of the hot-switching transient should not be exceeded.



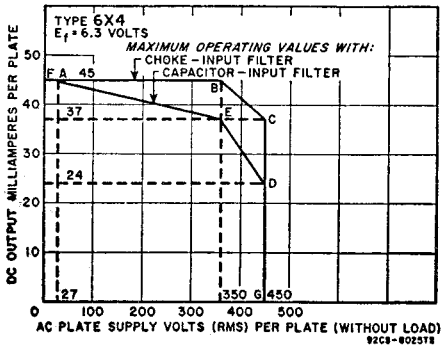




## TYPICAL OPERATION

| Filter Input | Sine Wave Operation Capacitor | Sine Wave Operation Choke | Vibrator Operation Capacitor | |
|---|---|---|---|---|
| AC Plate Supply Voltage (Each plate, rms)• | 325 | 400 | — | volts |
| Filter Input Capacitor | 10 | — | 10 | μF |
| Effective Plate Supply Impedance (Each plate) | 525 | — | — | ohms |
| Filter Input Choke | — | 10 | — | henries |
| Average Output Current | 70 | 70 | 70 | mA |
| DC Output Voltage at Input to Filter (Approx.) | 310 | 340 | 240 | volts |

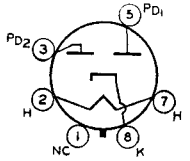
• AC plate supply voltage is measured without load.

RATING CHART




Refer to chart at end of section. **6X4W**

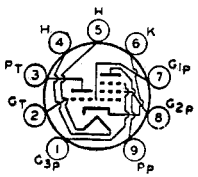
Refer to chart at end of section. **6X5**




## FULL-WAVE VACUUM RECTIFIER — 6X5GT

Glass octal type used in power supply of automobile and ac-operated receivers. **Outlines section,** 13D; requires octal socket. This type may be supplied with pin No.1 omitted. For maximum ratings, and typical operation, refer to type 6X4.

Refer to chart at end of section. **6X8**




## MEDIUM-MU TRIODE—SHARP-CUTOFF PENTODE — 6X8A

**5X8, 19X8**

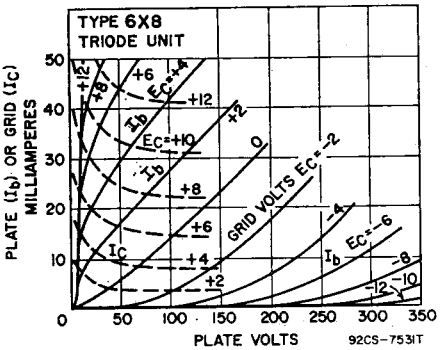
Miniature type used as combined oscillator and mixer tube in television receivers utilizing an intermediate frequency in the order of 40 MHz and in AM/FM receivers. **Outlines section,** 6B; requires miniature 9-contact socket. Types 5X8 and 19X8 are identical with type 6X8A except for heater ratings.

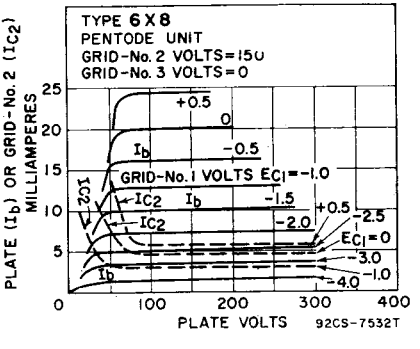
| | 5X8 | 6X8A | 19X8 | |
|---|---|---|---|---|
| Heater Voltage (ac/dc) | 4.7 | 6.3 | 18.4 | volts |
| Heater Current | 0.6 | 0.45 | 0.15 | ampere |
| Heater Warm-up Time (Average) | 11 | 11 | — | seconds |
| Heater-Cathode Voltage: | | | | |
| Peak value | ±200 max | ±200 max | ±200 max | volts |
| Average value | 100 max | 100 max | 100 max | volts |
| Direct Interelectrode Capacitances: | Unshielded | Shielded▲ | | |
| Triode Unit: | | | | |
| Grid to Plate | 1.5 | 1.5 | | pF |
| Grid to Cathode and Heater | 2 | 2.4 | | pF |
| Plate to Cathode and Heater | 0.5 | 1 | | pF |
| Pentode Unit: | | | | |
| Grid No.1 to Plate | 0.09 max | 0.06 max | | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | 4.6 | 4.8 | | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | 0.9 | 1.6 | | pF |
| Pentode Grid No.1 to Triode Plate | 0.05 max | 0.04 max | | pF |
| Pentode Plate to Triode Plate | 0.05 max | 0.008 max | | pF |
| Heater to Cathode | 6.5 | 6.5• | | pF |

▲ With external shield connected to cathode except as noted.
• Wilth external shield connected to pentode plate.

## Class $A_1$ Amplifier

| MAXIMUM RATINGS (Design-Maximum Values) | Triode Unit | Pentode Unit | |
|---|---|---|---|
| Plate Voltage | 275 | 275 | volts |
| Grid No.2 (Screen-Grid) Supply Voltage | — | 275 | volts |
| Grid-No.2 Voltage | — | See curve page 300 | |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value | 0 | 0 | volts |
| Plate Dissipation | 1.7 | 2.3 | watts |
| Grid-No.2 Input: | | | |
| For grid-No.2 voltages up to 137.5 volts | — | 0.45 | watt |
| For grid-No.2 voltages between 137.5 and 275 volts | — | See curve page 300 | |
| **CHARACTERISTICS** | | | |
| Plate Voltage | 125 | 125 | volts |
| Grid No.3 | Connected to cathode at socket | | |
| Grid-No.2 Voltage | — | 125 | volts |
| Grid-No.1 Voltage | —1 | —1 | volt |
| Amplification Factor | 40 | — | |
| Plate Resistance (Approx.) | 6000 | 300000 | ohms |
| Transconductance | 6500 | 5500 | μmhos |
| Plate Current | 12 | 9 | mA |
| Grid-No.2 Current | — | 2.2 | mA |
| Grid-No.1 Voltage (Approx.) for plate current of 20 μA | —7 | —6.5 | volts |

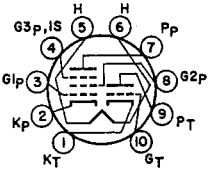



# 6X9/ ECF200

## HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Miniature type used as if-amplifier tube in television receivers. **Outlines section** 6B, except has 10-pin base; requires miniature 10-contact socket.




**10K**

| | | |
|---|---|---|
| Heater Voltage | 6.3 | volts |
| Heater Current | 0.41 | ampere |
| Peak Heater-Cathode Voltage | ±150 max | volts |
| Direct Interelectrode Capacitances: | | |
| Triode Unit: | | |
| Plate to All Other Elements (except grid) | 3 | pF |
| Grid to All Other Elements (except plate) | 2.5 | pF |
| Plate to Grid | 2 | pF |
| Pentode Unit: | | |
| Plate to All Other Elements (except grid No.1) | 3.5 | pF |
| Grid No.1 to All Other Elements (except plate) | 6.5 | pF |
| Grid No.1 to Cathode | 4 | pF |
| Plate to Grid No.1 | <6.5 | pF |
| Grid No.1 to Grid No.2 | 1.8 | pF |

| | | |
|---|---|---|
| Pentode Grid No.1 to Triode Plate | 15 | pF |
| Pentode Grid No.1 to Triode Grid | ≤1.2 | pF |
| Pentode Plate to Triode Plate | ≤1.5 | pF |

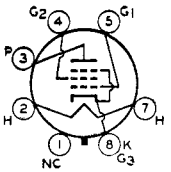
### Class $A_1$ Amplifier

| **MAXIMUM RATINGS** (Design-Maximum Values) | Triode Unit | Pentode Unit | |
|---|---|---|---|
| Plate Supply Voltage | 550 | 550 | volts |
| Plate Voltage | 250 | 250 | volts |
| Peak Plate Voltage* | 600 | — | volts |
| Grid-No.2 (Screen-Grid) Supply Voltage | — | 550 | volts |
| Grid-No.2 Voltage | — | 250 | volts |
| Cathode Current | 18 | 18 | mA |
| Plate Dissipation | 1.5 | 2.1 | watts |
| Grid-No.2 Input | — | 0.7 | watt |
| **CHARACTERISTICS** | | | |
| Plate Voltage | 170 | 160 | volts |
| Grid-No.3 (Suppressor-Grid) Voltage | — | 0 | volts |
| Grid-No.2 Voltage | — | 135 | volts |
| Grid-No.1 (Control-Grid) Voltage | —1 | —1.7 | volts |
| Mu Factor, Grid-No.1 to Grid-No.2 | — | 55 | |
| Amplification Factor | 55 | — | |
| Transconductance | 4800 | 14000 | μmhos |
| Plate Current | 8.5 | 13 | mA |
| Grid-No.2 Current | — | 5 | mA |
| **MAXIMUM CIRCUIT VALUES** | | | |
| Grid-No.1-Circuit Resistance | 1 | 1 | megohm |

* With a maximum duty factor of 0.18 and maximum pulse duration of 18 microseconds.

Refer to chart at end of section.

**6Y5**




7AC

## BEAM POWER TUBE

# 6Y6GA/ 6Y6G

Glass octal type used as output amplifier in radio receivers and in rf-operated, high-voltage power supplies in television equipment. **Outlines section, 19B;** requires octal socket.

| | | |
|---|---|---|
| Heater Voltage (ac/dc) | 6.3 | volts |
| Heater Current | 1.25 | amperes |
| Peak Heater-Cathode Voltage | ±180 max | volts |
| Direct Interelectrode Capacitances (Approx.): | | |
| Grid No.1 to Plate | 0.7 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | 12 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | 7.5 | pF |

### Class $A_1$ Amplifier

| | | |
|---|---|---|
| **MAXIMUM RATINGS** (Design-Center Values) | | |
| Plate Voltage | 200 | volts |
| Grid-No.2 (Screen-Grid) Supply Voltage | 200 | volts |
| Grid-No.2 Voltage | See curve page 300 | |
| Plate Dissipation | 12.5 | watts |
| Grid-No.2 Input: | | |
| For grid-No.2 voltages up to 100 volts | 1.75 | watts |
| For grid-No.2 voltages between 100 and 200 volts | See curve page 300 | |

| **TYPICAL OPERATION** | | | |
|---|---|---|---|
| Plate Voltage | 135 | 200 | volts |
| Grid-No.2 Voltage | 135 | 135 | volts |
| Grid-No.1 (Control-Grid) Voltage | —13.5 | —14 | volts |
| Peak AF Grid-No.1 Voltage | 13.5 | 14 | volts |
| Zero-Signal Plate Current | 58 | 61 | mA |
| Maximum-Signal Plate Current | 60 | 66 | mA |
| Zero-Signal Grid-No.2 Current | 3.5 | 2.2 | mA |
| Maximum-Signal Grid-No.2 Current | 11.5 | 9 | mA |
| Plate Resistance (Approx.) | 9300 | 18300 | ohms |
| Transconductance | 7000 | 7100 | μmhos |
| Load Resistance | 2000 | 2600 | ohms |
| Total Harmonic Distortion | 10 | 10 | per cent |
| Maximum-Signal Power Output | 3.6 | 6 | watts |

**MAXIMUM CIRCUIT VALUES**

| | | |
|---|---|---|
| Grid-No.1-Circuit Resistance: | | |
| For fixed-bias operation | 0.1 | megohm |
| For cathode-bias operation | 0.5 | megohm |

**6Y6GT** For replacement use type 6Y6GA/6Y6G.

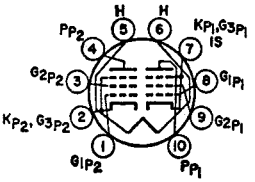
**6Y7G** Refer to chart at end of section.

**6Y9** Refer to chart at end of section. For replacement use type 6Y9/EFL200.

# 6Y9/EFL200

17Y9

## DUAL PENTODE




10L

Miniature type for use in color and black-and-white television receiver applications. Unit No. 1 is used as a video output pentode, and unit No. 2 as a sound if amplifier, agc amplifier, or sync separator. **Outlines section**, 6L, except has 10-pin base; requires miniature 10-contact socket. Type 17Y9 is identical with type 6Y9/EFL200 except for heater ratings.

| | 6Y9/EFL200 | 17Y9 | |
|---|---|---|---|
| Heater Voltage | 6.3 | 16.5 | volts |
| Heater Current | 0.8 | 0.3 | ampere |
| Peak Heater-Cathode Voltage | ±200 | ±200 | volts |
| Direct Interelectrode Capacitances: | | | |
| Unit No.1: | | | |
| Plate to All Other Elements (except grid No.1) | | 7 | pF |
| Grid No.1 to All Other Elements (except plate) | | 12 | pF |
| Plate to Grid No.1 | | 95 | pF |
| Unit No.2: | | | |
| Plate to All Other Elements (except grid No.1) | | 11 | pF |
| Grid No.1 to All Other Elements (except plate) | | 10 | pF |
| Plate to Grid No.1 | | 140 | pF |
| Grid No.1 to Heater | | <100 | pF |
| Plate to Plate | | <150 | pF |
| Grid to Grid | | <10 | pF |
| Plate (Unit No.1) to Grid No.1 (Unit No.2) | | <100 | pF |
| Plate (Unit No.2) to Grid No.1 (Unit No.2) | | <5 | pF |

### Class $A_1$ Amplifier

| **MAXIMUM RATINGS** (Design-Maximum Values) | Unit No.1 | Unit No.2 | |
|---|---|---|---|
| Plate Supply Voltage | 550 | 550 | volts |
| Plate Voltage | 250 | 250 | volts |
| Grid-No.2 (Screen-Grid) Supply Voltage | 550 | 550 | volts |
| Grid-No.2 Voltage | 250 | 250 | volts |
| Cathode Current | 60 | 15 | mA |
| Plate Dissipation | 5 | 1.5 | watts |
| Grid-No.2 Input | 2.5 | 0.5 | watts |
| **CHARACTERISTICS** | | | |
| Plate Voltage | 170 | 150 | volts |
| Grid-No.2 Voltage | 170 | 150 | volts |
| Grid-No.1 (Control-Grid) Voltage | —2.6 | —2.3 | volts |
| Mu Factor, Grid-No.1 to Grid-No.2 | 38 | 35 | |
| Internal Resistance | 40 | 160 | kohms |
| Transconductance | 21000 | 8500 | μmhos |
| Plate Current | 30 | 10 | mA |
| Grid-No.2 Current | 6.5 | 3 | mA |
| **MAXIMUM CIRCUIT VALUES** | | | |
| Grid-No.1-Circuit Resistance | 1 | 1 | megohm |

**6Z4** Refer to chart at end of section. For replacement use type 84/6Z4.

**6Z5** Refer to chart at end of section.

**6Z7G** Refer to chart at end of section.

**6Z10** Refer to chart at end of section.