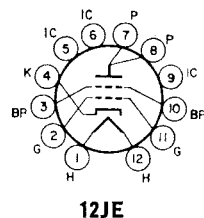


6JH5

6JH5/6HZ5/6JD5

BEAM TRIODE

Duodecar type used as a pulse-type regulator in the high-voltage power supply of color television receivers. Outlines section, 15F; requires duodecar 12-contact socket. Heater: volts (ac/dc), 6.3; amperes, 2.4.

**12JE****Class A₁ Amplifier****CHARACTERISTICS**

| | | |
|--|-------------------------|--------|
| Pulse Plate Voltage* | 3500 | volts |
| Grid No.2 (Beam Plate) | Connected to cathode at | socket |
| Grid-Voltage, Negative-bias value | 4.4 | volts |
| Peak Plate Current | 300 | mA |
| Amplification Factor | 300 | |
| Transconductance | 65000 | μmhos |
| Plate Resistance (Approx.) | 4600 | ohms |
| Grid Voltage (Approx.) for plate current of 1 mA | -16 | volts |

* Duty cycle of the pulse must be less than 2.5%.

High-Voltage Regulator Service

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

MAXIMUM RATINGS (Design-Maximum Values)

| | | |
|-------------------------------------|-----------|-------|
| Peak Plate Voltage# | 5500 | volts |
| Plate Dissipation | 35 | watts |
| Peak Plate Current | 325 | mA |
| Heater-Cathode Voltage: | | |
| Peak value | +200 —450 | volts |
| Average value | 100 | volts |
| Bulb Temperature (At hottest point) | 240 | °C |

MAXIMUM CIRCUIT VALUE

| | | |
|--------------------------------------|-----|--------|
| Grid-Circuit Resistance [▲] | 0.1 | megohm |
|--------------------------------------|-----|--------|

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

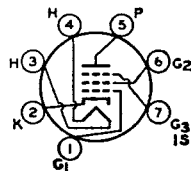
▲ Larger values of grid-circuit resistance may be used if provisions are made to protect the tube.

6JH6

4JH6

**SEMIREMOTE-CUTOFF
PENTODE**

Miniature type used in the gain-controlled picture if-amplifier stages of color and black-and-white television receivers. Outlines section, 5C; requires miniature 7-contact socket. For curves of average plate characteristics, refer to type 6BZ6. Type 4JH6 is identical with type 6JH6 except for heater ratings.

**7CM**

| | | | |
|---|-------------|-------------|---------|
| Heater Arrangement | 4JH6 | 6JH6 | |
| Heater Voltage (ac/dc) | Series | Parallel | |
| Heater Current | 4.2 | 6.3 | volts |
| Heater Warm-up Time | 0.45 | 0.3 | ampere |
| Heater-Cathode Voltage: | | | seconds |
| Peak value | ±200 max | ±200 max | volts |
| Average value | 100 max | 100 max | volts |
| Direct Interelectrode Capacitances: | | | |
| Grid No.1 to Plate | Unshielded | Shielded* | |
| Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield | 0.025 max | 0.015 max | pF |
| Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield | 7 | 7 | pF |
| | 2 | 3 | pF |

* With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

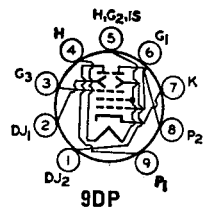
| | | |
|---|--------------------|-------|
| Plate Voltage | 300 | volts |
| Grid-No.3 (Suppressor-Grid) Voltage, Positive value | 0 | volts |
| Grid-No.2 (Screen-Grid) Supply Voltage | 300 | volts |
| Grid-No.2 Voltage | See curve page 300 | |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value | 0 | volts |
| Grid-No.2 Input: | | |
| For grid-No.2 voltages up to 150 volts | 0.55 | watt |
| For grid-No.2 voltages between 150 and 300 volts | See curve page 300 | |

CHARACTERISTICS

| | | |
|---|--------------------------------|------------|
| Plate Supply Voltage | 125 | volts |
| Grid-No.3 | Connected to cathode at socket | |
| Grid-No.2 Supply Voltage | 125 | volts |
| Cathode-Bias Resistor | 56 | ohms |
| Plate Resistance (Approx.) | 0.26 | megohm |
| Transconductance | 8000 | μ mhos |
| Transconductance Range for grid-No.1 voltage of -4.5 volts and cathode-bias resistor of 56 ohms | 400-900 | μ mhos |
| Plate Current | 14 | mA |
| Grid-No.2 Current | 3.6 | mA |
| Grid-No.1 Voltage (Approx.) for transconductance of 50 μ mhos | -19 | volts |

MAXIMUM CIRCUIT VALUES

| | | |
|----------------------------------|------|--------|
| Grid-No.1-Circuit Resistance: | | |
| For fixed-bias operation | 0.25 | megohm |
| For cathode-bias operation | 1 | megohm |



BEAM-DEFLECTION TUBE

6JH8

Miniature type used in color-demodulator and burst-gate circuits in color television receivers. This type has two plates and two deflecting electrodes; the control grid varies beam deflection. Outlines section, 6E; requires miniature 9-contact socket. Pin 5 should be connected to cathode at socket. The 6JH8 should be so located in the equipment that it is not subjected to stray magnetic fields.

| | | |
|---|----------|---------|
| Heater Voltage (ac/dc) | 6.3 | volts |
| Heater Current | 0.3 | amperes |
| Direct Interelectrode Capacitances: | | |
| Grid No.1 to All Other Electrodes, Except Both Plates | 7.5 | pF |
| Grid No.1 to Deflecting Electrode No.1 | 0.04 max | pF |
| Grid No.1 to Deflecting Electrode No.2 | 0.07 max | pF |
| Plate No.1 to All Other Electrodes | 5 | pF |
| Plate No.2 to All Other Electrodes | 5 | pF |
| Plate No.1 to Plate No.2 | 0.4 | pF |
| Deflecting Electrode No.1 to All Other Electrodes | 4.8 | pF |
| Deflecting Electrode No.2 to All Other Electrodes | 4.8 | pF |
| Deflecting Electrode No. 1 to Deflecting Electrode No.2 | 0.38 | pF |

Color TV Demodulator

MAXIMUM RATINGS (Design-Maximum Values)

| | | |
|---|-----|-------|
| Plate Voltage (Each Plate) | 330 | volts |
| Peak Deflecting-Electrode Voltage (Each Electrode): | | |
| Negative value | 165 | volts |
| Positive value | 165 | volts |
| Grid-No.3 (Accelerating-Grid) Voltage | 330 | volts |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value | 0 | volts |
| Cathode Current | 33 | mA |
| Plate Dissipation (Each Plate) | 3 | watts |
| Grid-No.3 Input | 1 | watt |

MAXIMUM CIRCUIT VALUES

| | | |
|----------------------------------|------|--------|
| Grid-No.1 Circuit Resistance: | | |
| For fixed-bias operation | 0.1 | megohm |
| For cathode-bias operation | 0.25 | megohm |

Class A₁ Amplifier

With both plates connected together and with both deflecting electrodes connected to cathode at socket

CHARACTERISTICS

| | | |
|---|------|------------|
| Plate-No.1 Supply Voltage | 250 | volts |
| Plate-No.2 Supply Voltage | 250 | volts |
| Grid-No.3 Voltage | 250 | volts |
| Cathode-Bias Resistor | 220 | ohms |
| Transconductance | 4400 | μ mhos |
| Total Plate Current | 14 | mA |
| Grid-No.3 Current | 1.5 | mA |
| Grid-No.1 Voltage (Approx.) for total plate current of 10 μ A | -13 | volts |

6JK6 Refer to chart at end of section.

6JK8 Refer to chart at end of section.

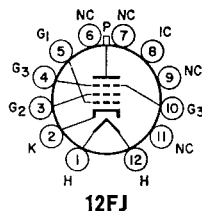
6JM6 Refer to chart at end of section.

6JM6A

17JM6A

BEAM POWER TUBE

Duodecar types used as horizontal-amplifier tubes in color and black-and-white television receivers. Outlines section, 39A; requires duodecar 12-contact socket. Type 17JM6A is identical with type 6JM6A except for heater ratings.



| | 6JM6A | 17JM6A | |
|--|---------------|---------------|---------|
| Heater Voltage (ac/dc) | 6.3 | 16.8 | volts |
| Heater Current | 1.2 | 0.45 | amperes |
| Heater Warm-up Time (Average) | — | 11 | seconds |
| Heater-Cathode Voltage: | | | |
| Peak value | ± 200 max | ± 200 max | volts |
| Average value | 100 max | 100 max | volts |
| Direct Interelectrode Capacitances: | | | |
| Grid No.1 to Plate | — | 0.6 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | — | 16 | pF |
| Plate to Cathode, Heater, Grid No. 2, and Grid No. 3 | — | 7 | pF |

Class A₁ Amplifier

CHARACTERISTICS

| | Pentode Connection | | | Triode** Connection | |
|--|--------------------|------|-------|------------------------|------------|
| Plate Voltage | 5000 | 55 | 250 | 150 | volts |
| Grid-No.3 (Suppressor-Grid) | — | — | — | — | |
| Grid-No.2 (Screen-Grid) Voltage | 150 | 150 | 150 | 150 | volts |
| Grid-No.1 (Control-Grid) Voltage | — | 0 | -22.5 | -22.5 | volts |
| Plate Resistance (Approx.) | — | — | 15000 | — | ohms |
| Transconductance | — | — | 7300 | — | μ mhos |
| Plate Current | — | 345* | 65 | — | mA |
| Grid-No.2 Current | — | 30* | 1.8 | — | mA |
| Grid-No.1 Voltage (Approx.) for plate current of 1 μ A | -100 | — | -42 | — | volts |
| Amplification Factor | — | — | — | 4.4 | |

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance 1 megohm

* This value can be measured by a method utilizing a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

** Grid No.2 tied to plate.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

| | | |
|------------------------------------|------|-------|
| DC Plate Supply Voltage | 770 | volts |
| Peak Positive-Pulse Plate Voltage# | 6500 | volts |
| Peak Negative-Pulse Plate Voltage | 1500 | volts |
| DC Grid-No.3 Voltage | 70 | volts |

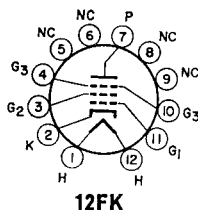
| | | |
|---|------|-------|
| DC Grid-No.2 Voltage | 220 | volts |
| DC Grid-No.1 Voltage, Negative-bias value | 55 | volts |
| Peak Negative-Pulse Grid-No.1 Voltage | 330 | volts |
| Average Cathode Current | 175 | mA |
| Peak Cathode Current | 550 | mA |
| Plate Dissipation## | 17.5 | watts |
| Grid-No.2 Input | 3.5 | watts |
| Bulb Temperature (At hottest point) | 220 | °C |

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).
 ## A bias resistor or other means is required to protect the tube in absence of excitation.

6JN6

12JN6, 17JN6

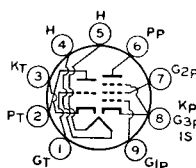
BEAM POWER TUBE



12FK

Duodeca type used as horizontal-amplifier tube in color and black-and-white television receivers. Outlines section, 15A; requires duodeca 12-contact socket. This type is electrically identical with type 6JM6 except that it has a slightly lower grid-No.1-to-plate capacitance. Types 12JN6 and 17JN6 are identical with type 6JN6 except for heater ratings.

| | 6JN6 | 12JN6 | 17JN6 | |
|--|------|-------|-------|---------|
| Heater Voltage (ac/dc) | 6.3 | 12.6 | 16.8 | volts |
| Heater Current | 1.2 | 0.6 | 0.45 | amperes |
| Heater Warm-up Time (Average) | — | 11 | 11 | seconds |
| Direct Interelectrode Capacitances: | | | | |
| Grid No.1 to Plate | | | 0.34 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | | | 16 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | | | 7 | pF |



9FA

MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

6JN8

19JN8/19CL8A

Miniature type used as FM converter and rf amplifier in radio receivers. Outlines section, 6B; requires miniature 9-contact socket. Type 19JN8/19CL8A is identical with type 6JN8 except for heater ratings.

| | 6JN8 | 19JN8/ 19CL8A | |
|---|----------|------------------|---------|
| Heater Voltage (ac/dc) | 6.3 | 18.9 | volts |
| Heater Current | 0.45 | 0.15 | ampere |
| Heater Warm-up Time (Average) | 11 | — | seconds |
| Heater-Cathode Voltage: | | | |
| Peak value | ±200 max | ±200 max | volts |
| Average value | 100 max | 100 max | volts |
| Direct Interelectrode Capacitances*: | | | |
| Pentode Unit: | | | |
| Grid No.1 to Plate | | 0.01 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield | | 5.5 | pF |
| Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield | | 3.4 | pF |
| Triode Unit: | | | |
| Grid to Plate | | 1.7 | pF |
| Grid to Cathode, Heater, Pentode Cathode, Grid No.3, and Internal Shield | | 3.2 | pF |
| Plate to Cathode, Heater, Pentode Cathode, Grid No.3, and Internal Shield | | 2.2 | pF |

* With external shield connected to cathode of unit under test.

Class A₁ Amplifier

| MAXIMUM RATINGS (Design-Maximum Values) | Triode Unit | Pentode Unit | |
|--|-------------|--------------------|-------|
| Plate Voltage | 300 | 300 | volts |
| Grid-No.2 (Screen-Grid) Supply Voltage | — | 300 | volts |
| Grid-No.2 Voltage | — | See curve page 300 | |

| | | | |
|---|-----|--------------------|-------|
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value | 0 | 0 | volts |
| Plate Dissipation | 2.5 | 2.5 | watts |
| Grid-No.2 Input: | | | |
| For grid-No.2 voltages up to 150 volts | — | 0.55 | watt |
| For grid-No.2 voltages between 150 and 300 volts | — | See curve page 300 | |

CHARACTERISTICS

| | | | |
|---|------|--------|------------|
| Plate Voltage | 125 | 125 | volts |
| Grid-No.2 Voltage | — | 125 | volts |
| Grid-No.1 Voltage | —1 | —1 | volt |
| Amplification Factor | 46 | — | |
| Plate Resistance (Approx.) | 5400 | 200000 | ohms |
| Transconductance | 8500 | 7500 | μ mhos |
| Plate Current | 13.5 | 12 | mA |
| Grid-No.2 Current | — | 4 | mA |
| Grid-No.1 Voltage (Approx.) for plate current of 10 μ A | —8 | —8 | volts |

MAXIMUM CIRCUIT VALUES

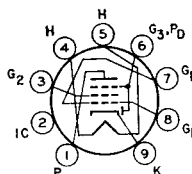
| | | | |
|-------------------------------|-----|-----|---------|
| Grid-No.1-Circuit Resistance: | | | |
| For fixed-bias operation | 2.2 | 2.2 | megohms |
| For cathode-bias operation | 2.2 | 2.2 | megohms |

6JQ6

12JQ6, 17JQ6,

**BEAM POWER TUBE
with integral diode**

Miniature type featuring integral diode, internally connected to grid No.3, used in feedback-stabilized vertical-deflection-amplifier applications in color and black-and-white television receivers. Outlines section, 6G; requires miniature 9-contact socket. Types 12JQ6 and 17JQ6 are identical with type 6JQ6 except for heater ratings.

**9RA**

| | 6JQ6 | 12JQ6 | 17JQ6 | |
|---|---------------|---------------|---------------|---------|
| Heater Voltage (ac/dc) | 6.3 | 12.6 | 17 | volts |
| Heater Current | 1.2 | 0.6 | 0.45 | amperes |
| 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: | | | | |
| Grid No.1 to Plate | | | 0.32 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Diode Plate | | | 13 | pF |
| Plate to Cathode, Heater, Grid No.2, Grid No.3, and Diode Plate | | | 6 | pF |

Class A₁ Amplifier**CHARACTERISTICS**

| | | | |
|---|------|-------|------------|
| Plate Voltage | 40 | 140 | volts |
| Grid-No.3 (Suppressor-Grid) Voltage | 0 | 0 | volts |
| Grid-No.2 (Screen-Grid) Voltage | 120 | 140 | volts |
| Grid-No.1 (Control-Grid) Voltage | 0 | —18 | volts |
| Triode Amplification Factor* | — | 6.5 | |
| Plate Resistance (Approx.) | — | 10500 | ohms |
| Transconductance | — | 4200 | μ mhos |
| Plate Current | 150# | 35 | mA |
| Grid-No.2 Current | 20# | 2.5 | mA |
| Grid-No.1 Voltage for plate current of 1 mA | — | —37 | volts |
| Instantaneous Diode-Plate-to-Cathode Voltage Drop for Instantaneous Diode-Plate Current of 2 mA | — | 5 | volts |

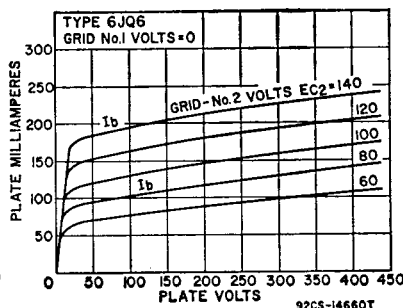
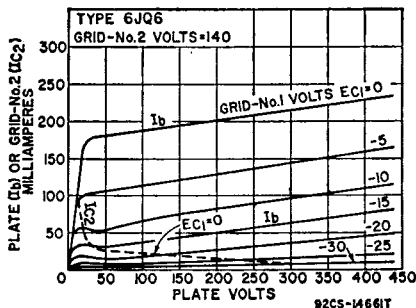
Vertical-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

| | | |
|---|-------------|-------|
| DC Plate Voltage | 425 | volts |
| Peak Positive-Pulse Plate Voltage (Absolute-Maximum Value)* | 2000 | volts |
| DC Grid-No.3 and Diode-Plate Voltage | +10 —150 | volts |

| | | |
|---|-----|-------|
| DC Grid-No.2 Voltage | 330 | volts |
| Peak Negative-Pulse Grid-No.1 Voltage | 150 | volts |
| Average Cathode Current | 70 | mA |
| Peak Cathode Current | 250 | mA |
| Average Diode-Plate (and Grid-No.3) Current | 1 | mA |
| Plate Dissipation | 10 | watts |
| Grid-No.2 Input | 2 | watts |
| Bulb Temperature (At hottest point) | 240 | °C |



MAXIMUM CIRCUIT VALUES

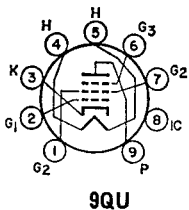
Grid-No.1—Circuit Resistance:

| | | |
|---|-----|---------|
| For grid-No.1-resistor-bias operation | 2.2 | megohms |
| For cathode-bias operation | 2.2 | megohms |

* Grid No.3 and diode plate connected to cathode, and grid-No.2 connected to plate at socket.

This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

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



BEAM POWER TUBE

6JR6

17JR6, 22JR6, 33JR6

Novar type used for horizontal-deflection amplifier service in low B+, black-and-white television receivers. Outlines section, 31D; requires novar 9-contact socket. Types 17JR6, 22JR6 and 33JR6 are identical with type 6JR6 except for heater ratings.

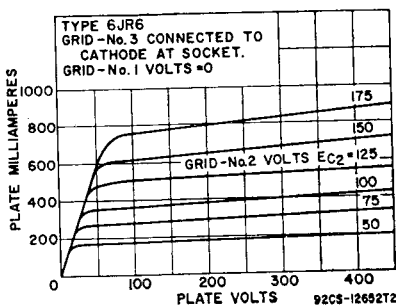
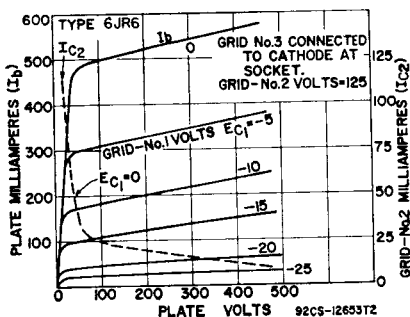
| | | | | | |
|--|-------------|--------------|--------------|--------------|---------|
| | 6JR6 | 17JR6 | 22JR6 | 33JR6 | |
| Heater Voltage (ac/dc) | 6.3 | 16.8 | 22 | 33 | volts |
| Heater Current | 1.6 | 0.6 | 0.45 | 0.3 | amperes |
| Heater Warm-up Time (Average) | — | 11 | 11 | 11 | seconds |
| Heater-Cathode Voltage: | | | | | |
| Peak value | ±200 max | ±200 max | ±200 max | ±200 max | volts |
| Average value | 100 max | 100 max | 100 max | 100 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 | | | | 22 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | | | | 9 | pF |

Class A₁ Amplifier

CHARACTERISTICS

| | | | | |
|--|---------------------------|--------------------------------|-------|-------|
| | Triode* Connection | Pentode Connection | | |
| Plate Voltage | 125 | 50 | 130 | volts |
| Peak Positive-Pulse Plate Voltage# | — | 6500 | — | volts |
| Grid No.3 (Suppressor Grid) | — | Connected to cathode at socket | | |
| Grid-No.2 (Screen-Grid) Voltage | 125 | 125 | 125 | volts |
| Grid-No.1 (Control-Grid) Voltage | -20 | 0 | -20 | volts |
| Plate Resistance (Approx.): | — | — | 18000 | ohms |
| Transconductance | — | — | 7000 | μmhos |

| | | | | | |
|---|-----|-----|------|-----|-------|
| Plate Current | — | — | 470‡ | 45 | mA |
| Grid-No.2 Current | — | — | 32‡ | 1.5 | mA |
| Grid-No.1 Voltage for plate current of 1 mA | — | -75 | — | -32 | volts |
| Amplification Factor | 4.7 | — | — | — | |



Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Ratings)

| | | |
|--|------|-------|
| Plate Supply Voltage | 770 | volts |
| Peak Positive-Pulse Plate Voltage# | 6500 | volts |
| Peak Negative-Pulse Plate Voltage | 1500 | volts |
| Grid-No.3 Voltage* | 75 | volts |
| Grid-No.2 Voltage | 220 | volts |
| Grid-No.1 Voltage, Negative-bias value | 55 | volts |
| Peak Negative-Pulse Grid-No.1 Voltage | 330 | volts |
| Peak Cathode Current | 950 | mA |
| Average Cathode Current | 275 | mA |
| Grid-No.2 Input | 3.5 | watts |
| Plate Dissipation* | 17 | watts |
| Bulb Temperature (At hottest point) | 240 | °C |

MAXIMUM CIRCUIT VALUES

| | | |
|--|------|---------|
| Grid-No.1-Circuit Resistance: | | |
| Cathode bias (with min. $R_K = 100\Omega$) | 1 | megohm |
| Grid-leak bias (with signal peak clamped to zero bias) | 10 | megohms |
| Fixed bias (where positive grid current is not drawn) | 0.47 | megohm |

* Grid No. 2 connected to plate at socket.

Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).
 ‡ This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

▪ In this service, a positive value may be applied to grid No.3 to minimize "snivets" interference; a typical value for this voltage is 30 volts.

• A bias resistor or other means is required to protect the tube in absence of excitation.

6JS6
6JS6A

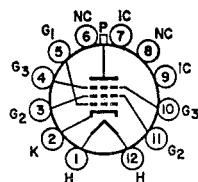
Refer to chart at end of section.

6JS6C

BEAM POWER TUBE

23JS6A, 31JS6C

Duodecar types used as horizontal-deflection amplifiers in color and black-and-white television receivers. Outlines section, 16B; requires duodecar 12-contact socket. Types 23JS6A and 31JS6A are identical with type 6JS6C except for heater ratings.



12FY

| | | | | |
|------------------------------------|------|------|------|---------|
| Heater Voltage (ac/dc) | 6.3 | 23.6 | 31.5 | volts |
| Heater Current | 2.25 | 0.6 | 0.45 | amperes |
| Heater Warm-up Tme (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: | | | | |
| Grid No.1 to Plate | | | 0.7 | pF |
| Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3 | | | 24 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | | | 10 | pF |

Class A₁ Amplifier

| CHARACTERISTICS | Triode†† | | Pentode Connection | | |
|---|----------|------|--------------------------------|-------|-------|
| | 125 | 5000 | 60 | 175 | |
| Plate Voltage | 125 | 5000 | 60 | 175 | volts |
| Grid No.3 (Suppressor Grid) | — | — | Connected to cathode at socket | | |
| Grid-No.2 (Screen-Grid) Voltage | 125 | 125 | 125 | 125 | volts |
| Grid-No.1 (Control-Grid) Voltage | -25 | — | 0 | -25 | volts |
| Plate Resistance (Approx.) | — | — | — | 5500 | ohms |
| Transconductance | — | — | — | 11500 | μmhos |
| Plate Current | — | — | 600‡ | 130 | mA |
| Grid-No.2 Current | — | — | 32‡ | 2.8 | mA |
| Grid-No.1 Voltage (Approx.) for plate current of 1 mA | — | -125 | — | -54 | volts |
| Triode Amplification Factor | 3 | — | — | — | |

‡ This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

†† Grid No.2 connected to plate.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

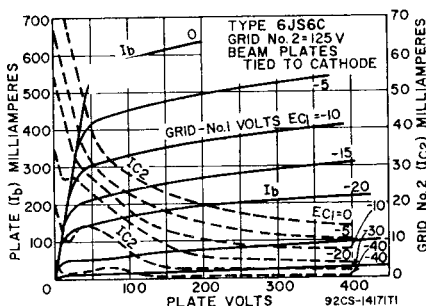
| | | |
|---|------|-------|
| DC Plate Supply Voltage | 990 | volts |
| Peak Positive-Pulse Plate Voltage# | 7500 | volts |
| Peak Negative-Pulse Plate Voltage | 1200 | volts |
| DC Grid-No.3 Voltage | 75 | volts |
| DC Grid-No.2 Voltage | 220 | volts |
| Peak Negative-Pulse Grid-No.1 Voltage | 330 | volts |
| Average Cathode Current | 350 | mA |
| Peak Cathode Current | 1200 | mA |
| Plate Dissipation** | 30 | watts |
| Grid-No.2 Input | 5.5 | watts |
| Bulb Temperature (At hottest point) | 225 | °C |

MAXIMUM CIRCUIT VALUE

| | | |
|--|------|---------|
| Grid-No.1-Circuit Resistance | | |
| For grid bias feedback HV regulation | 0.47 | megohm |
| For dc or pulse shunt HV regulation | 10 | megohms |

Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).

** A bias resistor or other means is required to protect the tube in absence of excitation



Refer to chart at end of section.

6JT6