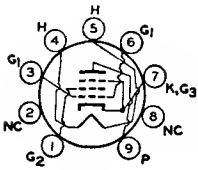
## BEAM POWER TUBE 6CM6



9CK

Miniature type used as vertical-deflection amplifier in color and black-and-white television receivers and as audio power amplifier in radio and television receivers. Outlines section, 6E; requires miniature 9-contact socket. For typical operation and maximum circuit values as class $A_1$ amplifier, refer to type 6V6GTA. For curves of average plate characteristics, refer to type 6AQ5A.

| | | |
|---|---|---|
| Heater Voltage (ac/dc) | 6.3 | volts |
| Heater Current | 0.45 | ampere |
| Heater-Cathode Voltage: | | |
| Peak value | ±200 max | volts |
| Average value | 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 | 8 | pF |
| Plate to Cathode, Heater, Grid No.2, and Grid No.3 | 8.5 | pF |

### Class $A_1$ Amplifier

| | | |
|---|---|---|
| **MAXIMUM RATINGS** (Design-Center Values) | | |
| Plate Voltage | 315 | volts |
| Grid-No.2 (Screen-Grid) Voltage | 285 | volts |
| Plate Dissipation | 12 | watts |
| Grid-No.2 Input | 2 | watts |
| **CHARACTERISTICS** (Triode Connected) | | |
| Plate Voltage | 250 | volts |
| Grid-No.1 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 | —37 | volts |

### Vertical-Deflection Amplifier

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

| | Triode Connection• | Pentode Connection | |
|---|---|---|---|
| **MAXIMUM RATINGS** (Design-Center Values) | | | |
| DC Plate Voltage | 315 | 315 | volts |
| Peak Positive-Pulse Plate Voltage# (Absolute Maximum) | 2000▲ | 2000▲ | volts |
| DC Grid-No.2 (Screen-Grid) Voltage | — | 285 | volts |
| Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage | 250 | 250 | volts |
| Peak Cathode Current | 120 | 120 | mA |
| Average Cathode Current | 40 | 40 | mA |
| Plate Dissipation | 9 | 8 | watts |
| Grid-No.2 Input | — | 1.75 | watts |
| **MAXIMUM CIRCUIT VALUES** | | | |
| Grid-No.1-Circuit Resistance, for cathode-bias operation | 2.2 | 2.2 | megohms |

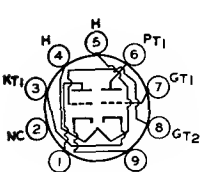
• Grid No.2 connected to plate.

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

▲ Under no circumstances should this absolute value be exceeded.

## MEDIUM-MU DUAL TRIODE 6CM7

8CM7



9ES

Miniature type used as combined vertical-deflection oscillator and vertical-deflection amplifier in black-and-white television receivers. Unit No.1 is used as a conventional blocking oscillator in vertical-deflection circuits, and unit No.2 as a vertical-deflection amplifier. Outlines section, 6E; requires miniature 9-contact socket. Types 8CM7 is identical with type 6CM7 except for heater ratings.