# Sharp-Cutoff Tetrode

## 7-PIN MINIATURE TYPE

### GENERAL DATA

**Electrical:**

| | | | |
|---|---|---|---|
| Heater, for Unipotential Cathode: | | | |
| Voltage (AC or DC) | 6.3 ± 10% | | volts |
| Current at 6.3 volts | 0.2 | | amp |
| Direct Interelectrode Capacitances: | | | |
| | *Without External Shield* | *With External Shield*[a] | |
| Grid No.1 to plate | 0.06 max. | 0.05 max. | μμf |
| Grid No.1 to cathode & internal shield, grid No.2, and heater | 3.8 | 4.5 | μμf |
| Plate to cathode & internal shield, grid No.2, and heater | 2.3 | 3 | μμf |

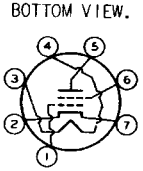
**Characteristics, Class $A_1$ Amplifier:**

| | | |
|---|---|---|
| Plate Voltage | 250 | volts |
| Grid-No.2 Voltage | 140 | volts |
| Grid-No.1 Voltage | −1 | volt |
| Plate Resistance (Approx.) | 0.15 | megohm |
| Transconductance | 8000 | μmhos |
| Plate Current | 10 | ma |
| Grid-No.2 Current | 0.95 | ma |
| Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 100 or less | −6 | volts |

**Mechanical:**

| | |
|---|---|
| Operating Position | Any |
| Maximum Overall Length | 2-1/8" |
| Maximum Seated Length | 1-7/8" |
| Length, Base Seat to Bulb Top (Excluding tip) | 1-1/2" ± 3/32" |
| Diameter | 0.650" to 0.750" |
| Dimensional Outline | See *General Section* |
| Bulb | T5-1/2 |
| Base | Small-Button Miniature 7-Pin (JEDEC No.E7-1) |
| Basing Designation for BOTTOM VIEW | 7EW |

Pin 1 – Grid No.1
Pin 2 – Cathode, Internal Shield
Pin 3 – Heater
Pin 4 – Heater




Pin 5 – Plate
Pin 6 – Grid No.2
Pin 7 – Cathode, internal Shield

# 6EA5

## AMPLIFIER — Class $A_1$

**Maximum Ratings,** *Design-Maximum Values:*

| | | | |
|---|---|---|---|
| PLATE VOLTAGE | 250 | max. | volts |
| GRID-No.2 (SCREEN-GRID) VOLTAGE | 150 | max. | volts |
| GRID-No.1 (CONTROL-GRID) VOLTAGE: | | | |
| Positive-bias value | 0 | max. | volts |
| CATHODE CURRENT | 20 | max. | ma |
| GRID-No.2 INPUT | 0.5 | max. | watt |
| PLATE DISSIPATION | 3.25 | max. | watts |
| PEAK HEATER-CATHODE VOLTAGE: | | | |
| Heater negative with respect to cathode | 200 | max. | volts |
| Heater positive with respect to cathode | 200[b] | max. | volts |

[a] With external shield JEDEC No.316 connected to cathode.
[b] The dc component must not exceed 100 volts.