



6CX8

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MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

| | | |
|------------------------------|-----------|-------|
| Voltage (AC or DC) | 6.3 ± 10% | volts |
| Current | 0.75 | amp |

Direct Interelectrode Capacitances:⁰

Triode Unit:

| | | |
|---------------------------------------|------|-----|
| Grid to plate | 4.4 | μμf |
| Grid to cathode and heater. | 2.2 | μμf |
| Plate to cathode and heater | 0.38 | μμf |

Pentode Unit:

| | | |
|---|------------|-----|
| Grid No.1 to plate. | 0.06 | μμf |
| Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater | 9 | μμf |
| Plate to cathode & internal shield & grid No.3, grid No.2, and heater. | 4.4 | μμf |
| Triode grid to pentode plate. | 0.018 max. | μμf |
| Pentode grid No.1 to triode plate | 0.005 max. | μμf |
| Pentode plate to triode plate | 0.17 max. | μμf |

Characteristics, Class A₁ Amplifier:

| | Triode Unit | Pentode Unit | | |
|--|----------------|-----------------|-------|-------|
| Plate Supply Voltage. | 150 | 40 | 200 | volts |
| Grid-No.2 Supply Voltage. | - | 125 | 125 | volts |
| Grid-No.1 Voltage | - | 0 | - | volts |
| Cathode Resistor. | 150 | - | 68 | ohms |
| Amplification Factor. | 40 | - | - | |
| Plate Resistance (Approx.) | 8700 | - | 70000 | ohms |
| Transconductance. | 4600 | - | 10000 | μmhos |
| Plate Current | 9.2 | 40* | 24 | ma |
| Grid-No.2 Current | - | 15.5* | 5.2 | ma |
| Grid-No.1 Voltage (Approx.) for plate μa = 100. | -5 | - | -8.5 | volts |

Mechanical:

| | |
|---|--|
| Operating Position. | Any |
| Maximum Overall Length. | 2-5/8" |
| Maximum Seated Length | 2-3/8" |
| Length, Base Seat to Bulb Top (Excluding tip) | 2" ± 3/32" |
| Diameter. | 0.750" to 0.875" |
| Dimensional Outline | See General Section |
| Bulb. | T6-1/2 |
| Base. | Small-Button Noval 9-Pin (JEDEC No.E9-1) |

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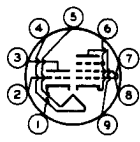


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Basing Designation for BOTTOM VIEW. 9DX

- Pin 1 - Triode Cathode
- Pin 2 - Triode Grid
- Pin 3 - Triode Plate
- Pin 4 - Heater
- Pin 5 - Heater



- Pin 6 - Pentode Cathode, Grid No.3, Internal Shield
- Pin 7 - Pentode Grid No.1
- Pin 8 - Pentode Grid No.2
- Pin 9 - Pentode Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

| | Triode Unit | Pentode Unit | |
|---|----------------|----------------------------|-------|
| PLATE VOLTAGE. | 330 max. | 330 max. | volts |
| GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE | - | 330 max. | volts |
| GRID-No.2 VOLTAGE. | - | <i>See Grid-No.2 Input</i> | |
| <i>Rating Chart at front of Receiving Tube Section</i> | | | |
| GRID-No.1 (CONTROL-GRID) VOLTAGE: | | | |
| Positive-bias value. | 0 max. | 0 max. | volts |
| GRID-No.2 INPUT: | | | |
| For grid-No.2 voltages up to 165 volts. | - | 1.1 max. | watts |
| For grid-No.2 voltages between 165 and 330 volts. | - | <i>See Grid-No.2 Input</i> | |

Rating Chart at front of Receiving Tube Section

| | | | |
|--|-----------------------|-----------------------|-------|
| PLATE DISSIPATION. | 2 max. | 5 max. | watts |
| PEAK HEATER-CATHODE VOLTAGE: | | | |
| Heater negative with respect to cathode | 200 max. | 200 max. | volts |
| Heater positive with respect to cathode | 200 [▲] max. | 200 [▲] max. | volts |

Maximum Circuit Values:

| | Triode Unit | Pentode Unit | |
|--------------------------------------|----------------|-----------------|--------|
| Grid-No.1-Circuit Resistance: | | | |
| For fixed-bias operation | 0.5 max. | 0.25 max. | megohm |
| For cathode-bias operation | 1 max. | 1 max. | megohm |

[○] without external shield.

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

[▲] The dc component must not exceed 100 volts.