



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 $\pm$ 10%	volts
Current	0.75	amp

Direct Interelectrode Capacitances:⁰

Triode Unit:

Grid to plate	4.4	μmf
Grid to cathode and heater.	2.2	μmf
Plate to cathode and heater	0.38	μmf

Pentode Unit:

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

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" $\pm$ 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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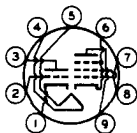


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Basing Designation for BOTTOM VIEW. 9DX

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.	—	See Grid-No.2 Input	
<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.	—	See Grid-No.2 Input	

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

⁰ 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.