



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:^o

Triode Unit:

Grid to plate	4.4	μf
Grid to cathode and heater	2.2	μf
Plate to cathode and heater	0.38	μf

Pentode Unit:

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

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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Basing Designation for BOTTOM VIEW. 9DX

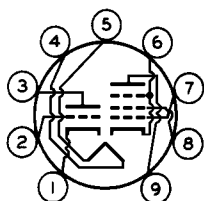
Pin 1—Triode
Cathode

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	

Rating Chart at front of Receiving Tube Section

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

[○] 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.