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MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

*Intended for use in equipment having
series heater-string arrangement*

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage	4.7		ac or dc volts
Current	0.6		amp
Warm-up time (Average)	11		sec

For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.

Direct Interelectrode Capacitances:⁰

Triode Unit:

Grid to plate.	1.7	μmf
Grid to cathode & pentode grid No.3 & internal shield, and heater.	1.9	μmf
Plate to cathode & pentode grid No.3 & internal shield, and heater.	1.4	μmf

Pentode Unit:

Grid No.1 to plate	0.05 max.	μmf
Grid No.1 to cathode, grid No.2, and heater	6	μmf
Plate to cathode, grid No.3 & triode cathode & internal shield, grid No.2, and heater	2.6	μmf
Plate to cathode, grid No.2, and heater	0.15	μmf
Triode grid to pentode plate	0.0078	μmf
Pentode grid No.1 to triode plate.	0.0033	μmf
Pentode plate to triode plate.	0.06	μmf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate-Supply Voltage	200	200	volts
Grid-No.2 Supply Voltage	—	150	volts
Grid Voltage	-6	—	volts
Cathode Resistor	—	180	ohms
Amplification Factor	19	—	
Plate Resistance (Approx.)	5750	300000	ohms
Transconductance	3300	6200	μmhos
Plate Current.	13	9.5	ma
Grid-No.2 Current.	—	2.8	ma
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 10$	-19	-8	volts

⁰: See next page.



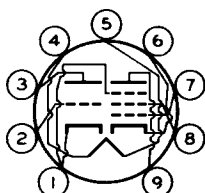
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Mechanical:

Operating Position	Any
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" $\pm$ 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See General Section
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW	9EC

Pin 1 — Pentode
Grid No.3,
Triode
Cathode,
Internal
Shield
Pin 2 — Triode Grid
Pin 3 — Triode Plate
Pin 4 — Heater



Pin 5 — Heater
Pin 6 — Pentode
Grid No.1
Pin 7 — Pentode
Cathode
Pin 8 — Pentode
Grid No.2
Pin 9 — Pentode
Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE.	300 max.	300 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	—	300 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 150 volts.	—	0.5 max.	watt
For grid-No.2 voltages between 150 and 300 volts.	—	See Grid-No.2 Input	

Rating Chart at front of Receiving Tube Section

PLATE DISSIPATION.	2.5 max.	2 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

°, ▲: See next page.



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Maximum Circuit Values:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
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.

▲ The dc component must not exceed 100 volts.

* If either unit is operated at maximum rated conditions, grid-No.1-circuit resistances for both units should not exceed the stated values.