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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 (AC or DC)	4.7	volts
Current	0.6 ± 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:⁰

Triode Unit:

Grid to plate	1.8	μf
Grid to cathode & pentode grid No.3 & internal shield, and heater.	2.8	μf
Plate to cathode & pentode grid No.3 & internal shield, and heater.	1.5	μf

Pentode Unit:

Grid No.1 to plate.	0.04 max.	μf
Grid No.1 to cathode, grid No.2, and heater	4.4	μf
Plate to cathode, grid No.3 & triode cathode & internal shield, grid No.2, and heater . .	2.6	μf
Plate to cathode, grid No.2, and heater.	0.3	μf
Triode grid to pentode plate.	0.01	μf
Pentode grid No.1 to triode plate . .	0.009	μf
Triode plate to pentode plate	0.065	μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage.	150	250	volts
Grid No.3	—	♦	
Grid-No.2 Supply Voltage.	—	110	volts
Grid-No.1 Voltage	0	0	volts
Cathode Resistor.	56	68	ohms
Amplification Factor.	40	—	
Plate Resistance (Approx.)	0.005	0.4	megohm
Transconductance.	8500	5200	μmhos
Plate Current	18	10	ma
Grid-No.2 Current	—	3.5	ma
Grid-No.1 Voltage (Approx.) for plate $\mu_a = 10$	-12	-10	volts



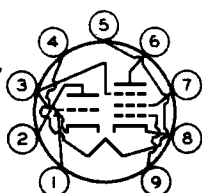
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Mechanical:

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 (JEDEC No. E9-1)
 Basing Designation for BOTTOM VIEW. 9EG

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



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

CONVERTER SERVICE

Maximum Ratings, Design-Center Values:

	Triode Unit as Osc.	Pentode Unit as Mixer	
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.	2.8 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



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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.

◆ Internally connected to triode cathode.

▲ 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.