

## High-Mu Twin Triode

## 9-PIN MINIATURE TYPE

For High-Fidelity Audio-Amplifier Applications Critical as to Noise and Hum

## GENERAL DATA

## Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC) . . . . .	6.3 ± 10%	volts
Current at 6.3 volts . . . . .	0.3	amp

Direct Interelectrode Capacitances  
(Each Unit, Approx.):

Grid to plate . . . . .	1.5	μf
Grid to cathode and heater . . . . .	1.6	μf
Plate to cathode and heater . . . . .	0.2	μf

## Equivalent Noise and Hum Voltage

(Referenced to Grid, Each Unit):

Average Value (RMS) . . . . . 1.8 μvolts

Measured in "true rms" units under the following conditions: Heater volts (AC)= 6.3; center-tap of heater transformer connected to ground; plate supply volts (DC)= 250; plate load resistor (megohms)= 0.1; cathode resistor (ohms)= 2700; cathode bypass capacitor (μf)= 100; grid resistor (ohms)= 0; amplifier frequency range 25 to 10000 cps.

Characteristics, Class A<sub>1</sub> Amplifier (Each Unit):

Plate Voltage . . . . .	100	250	volts
Grid Voltage . . . . .	-1	-2	volts
Amplification Factor . . . . .	100	100	
Plate Resistance (Approx.) . . . . .	80000	62500	ohms
Transconductance . . . . .	1250	1600	μmhos
Plate Current . . . . .	0.5	1.2	ma

## 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" ± 3/32"
Diameter . . . . .	0.750" to 0.875"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb . . . . .	T6-1/2
Base . . . . .	Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW . . . . .	9LS

Pin 1-Heater

Pin 2-Heater

Pin 3-No Connection

Pin 4-Cathode of Unit No.2

Pin 5-Grid of

Unit No.2



Pin 6-Plate of Unit No.2

Pin 7-Plate of Unit No.1

Pin 8-Grid of Unit No.1

Pin 9-Cathode of Unit No.1



# 6EU7

## AMPLIFIER — Class A<sub>1</sub>

*Values are for Each Unit*

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . .	330	max.	volts
GRID VOLTAGE:			
Negative-bias value. . . . .	55	max.	volts
Positive-bias value. . . . .	0	max.	volts
PLATE DISSIPATION. . . . .	1.2	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. .	200	max.	volts
Heater positive with respect to cathode. .	200 <sup>▲</sup>	max.	volts

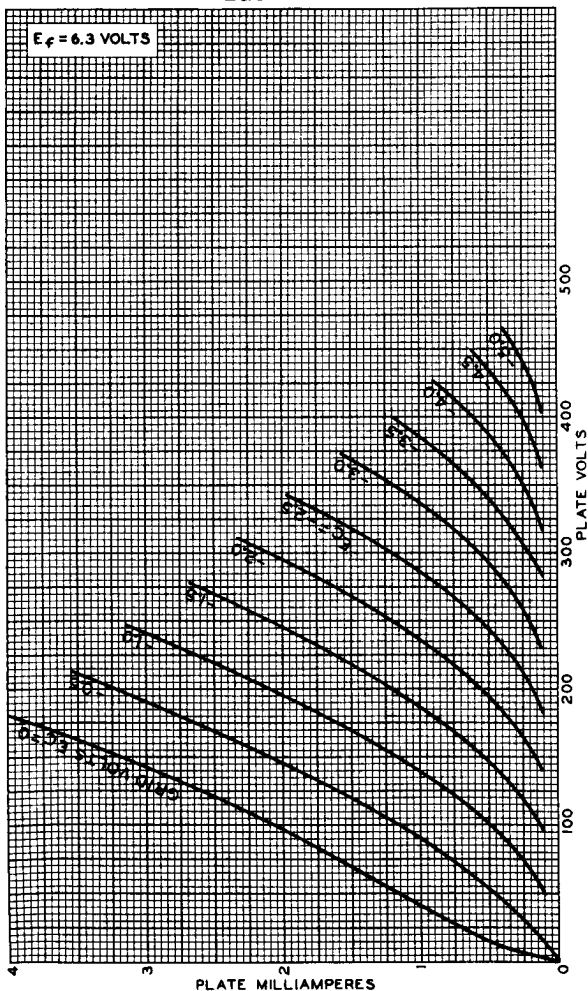
### Typical Operation as Resistance-Coupled Amplifier:

*See RESISTANCE-COUPLED-AMPLIFIER CHART No. 25  
at front of this Section*

<sup>▲</sup> The dc component must not exceed 100 volts.



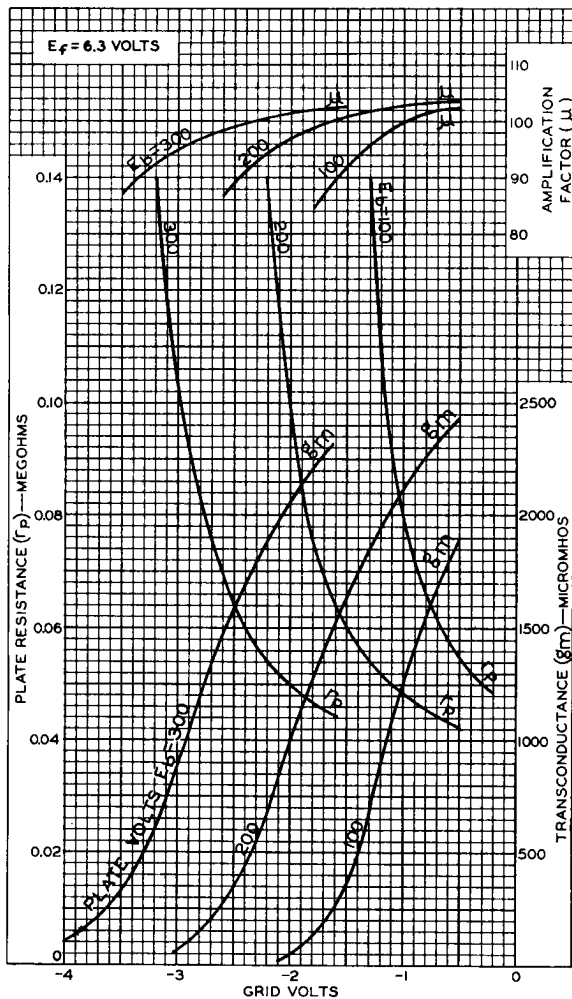
## AVERAGE PLATE CHARACTERISTICS Each Unit



92CM-10470



## AVERAGE CHARACTERISTICS Each Unit



92CM-10471