

Sharp-Cutoff Twin Pentode

With Common Cathode, Grid No.1, and Grid No.2

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) 6.3 $\pm$ 10% volts

Current at 6.3 volts. 0.3 amp

Direct Interelectrode Capacitances:^a

Grid No.3 to plate (Each unit) 1.9 $\mu\mu\text{f}$

Grid No.1 to all other electrodes 6 $\mu\mu\text{f}$

Grid No.3 to all other electrodes
(Each unit) 3.6 $\mu\mu\text{f}$

Plate to all other electrodes
(Each unit) 3 $\mu\mu\text{f}$

Grid No.3 (Unit No.1) to grid No.3

(Unit No.2) 0.015 max. $\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

With both units operating

Plate Voltage (Each Unit) 100 100 volts

Grid-No.3 Voltage (Each Unit) -10 0 volts

Grid-No.2 Voltage 67.5 67.5 volts

Grid-No.1 Voltage **b** **b** volts

Plate Current (Each Unit) - 2.2 ma

Grid-No.2 Current 6.5 3.3 ma

Cathode Current 6.6 7.8 ma

With one unit operating^c

Plate Voltage 100 100 volts

Grid-No.3 Voltage 0 0 volts

Grid-No.2 Voltage 67.5 67.5 volts

Grid-No.1 Voltage 0 **b** volts

Grid-No.3-to-Plate Transconductance - 180 μmhos

Grid-No.1-to-Plate Transconductance 1500 - μmhos

Plate Current - 2.2 ma

Grid-No.3 Voltage (Approx.) for
plate μa = 100. - -4.5 volts

Grid-No.1 Voltage (Approx.) for
plate μa = 100. - -2.3 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*

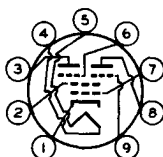
Bulb. T6-1/2



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Base Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9FG

Pin 1-Cathode
 Pin 2-Grid No.2,
 Internal
 Shield
 Pin 3-Plate of
 Unit No.2
 Pin 4-Heater
 Pin 5-Heater



Pin 6-Grid No.3 of
 Unit No.2
 Pin 7-Grid No.1
 Pin 8-Plate of
 Unit No.1
 Pin 9-Grid No.3 of
 Unit No.1

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE (Each unit).	300	max.	volts	←
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE (Each unit):				
Peak-positive value.	50	max.	volts	
Negative-bias value.	0	max.	volts	
Positive-bias value.	3	max.	volts	
GRID-No.2 (SCREEN-GRID) VOLTAGE.	150	max.	volts	
GRID-No.1 (CONTROL-GRID) VOLTAGE:				
Negative-bias value.	50	max.	volts	
CATHODE CURRENT.	12	max.	ma	
GRID-No.2 INPUT.	0.75	max.	watt	
PLATE DISSIPATION (Each unit).	1.1	max.	watts	
PEAK HEATER-CATHODE VOLTAGE:				
Heater negative with respect to cathode.	200	max.	volts	
Heater positive with respect to cathode.	200 ^d	max.	volts	

Maximum Circuit Values:

Grid-No.3-Circuit Resistance (Each unit)	0.5	max.	megohm
Grid-No.1-Circuit Resistance	0.5	max.	megohm

^a Without external shield.

^b Adjusted to give a dc grid-No.1 current of 100 microamperes.

^c With plate and grid No.3 of the other unit connected to ground.

^d The dc component must not exceed 100 volts.

← Indicates a change.

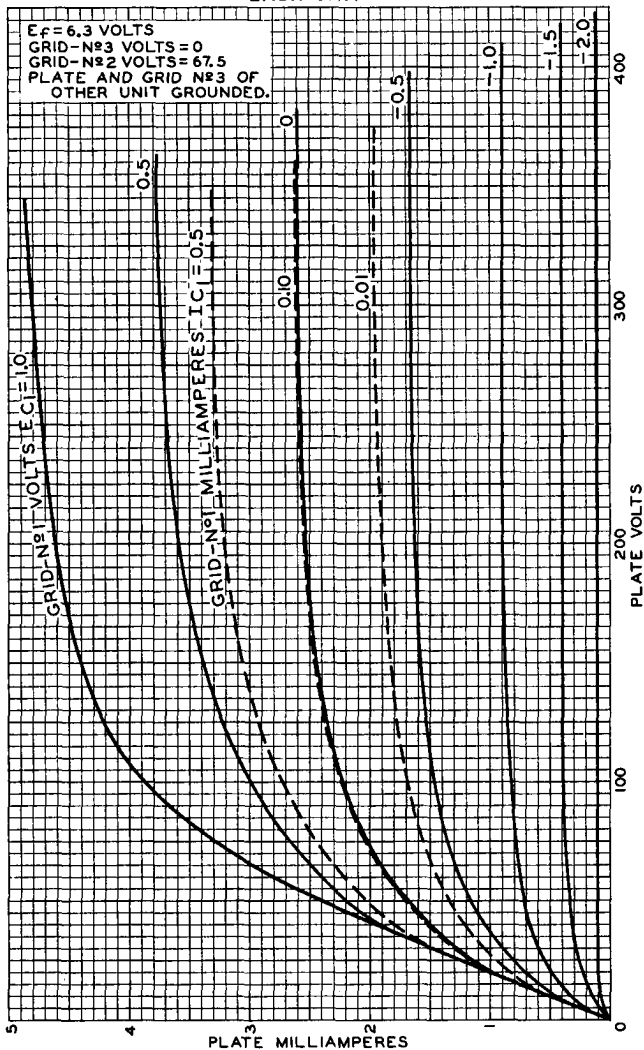




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AVERAGE PLATE CHARACTERISTICS EACH UNIT

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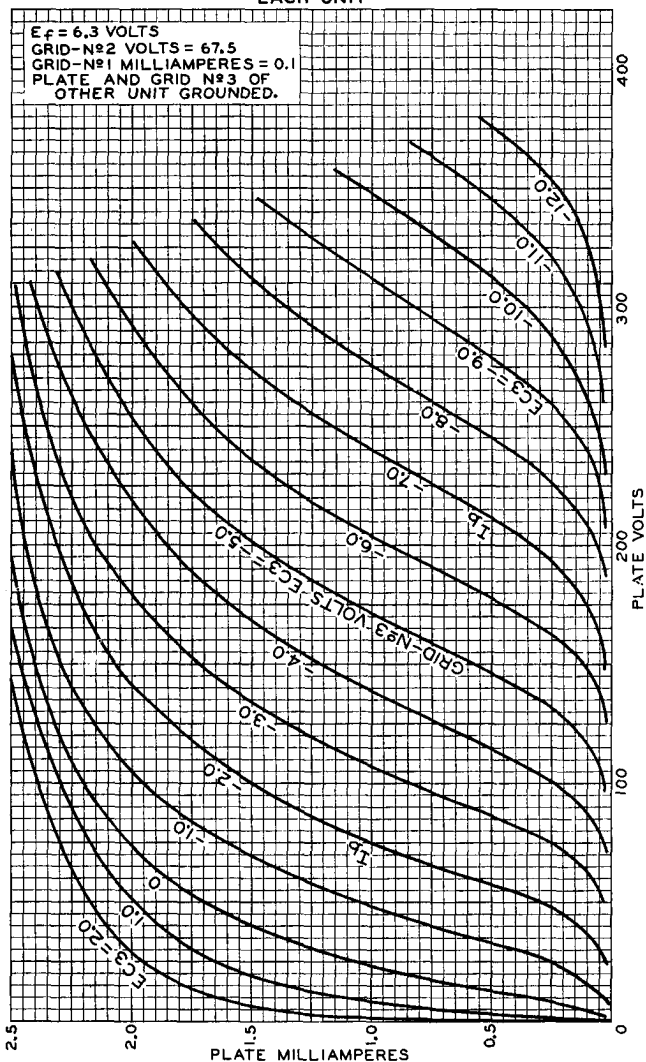


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AVERAGE PLATE CHARACTERISTICS EACH UNIT



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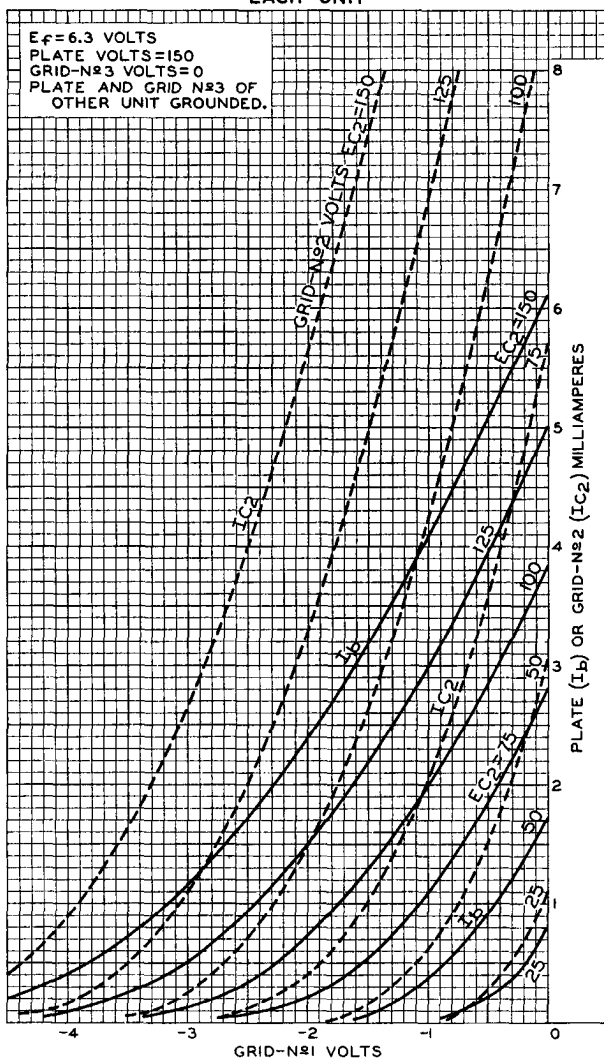
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AVERAGE CHARACTERISTICS
EACH UNIT

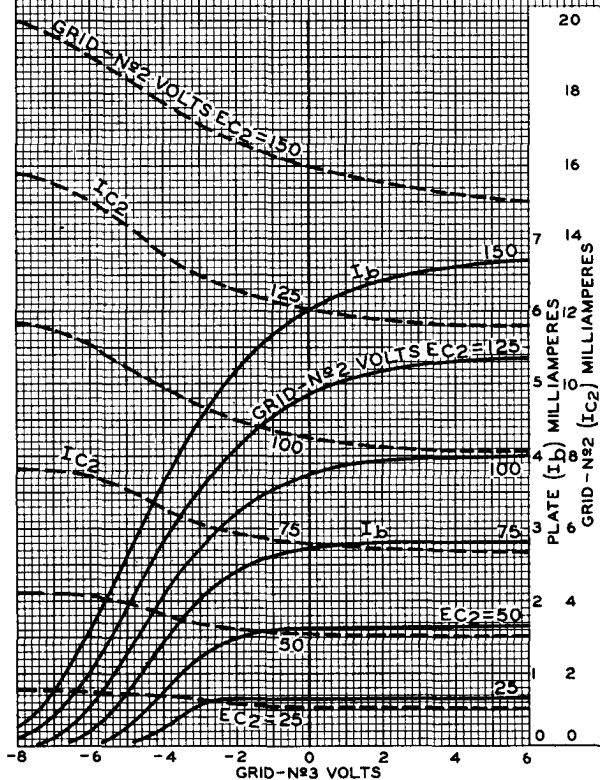
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AVERAGE CHARACTERISTICS EACH UNIT

$E_f = 6.3$ VOLTS
 PLATE VOLTS = 150
 GRID-Nº1 MILLIAMPERES = 0.1
 PLATE AND GRID Nº3 OF
 OTHER UNIT GROUNDED.



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