

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	μ f
Grid No.1 to all other electrodes	6	μ f
Grid No.3 to all other electrodes (Each unit)	3.6	μ f
Plate to all other electrodes (Each unit)	3	μ f
Grid No.3 (Unit No.1) to grid No.3 (Unit No.2)	0.015 max.	μ 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	μ hos
Grid-No.1-to-Plate Transconductance	1500	-	μ hos
Plate Current	-	2.2	ma
Grid-No.3 Voltage (Approx.) for plate μ a = 100.	-	-4.5	volts
Grid-No.1 Voltage (Approx.) for plate μ a = 100.	-	-2.3	volts

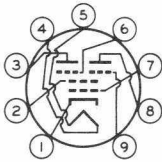
Mechanical:

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



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.

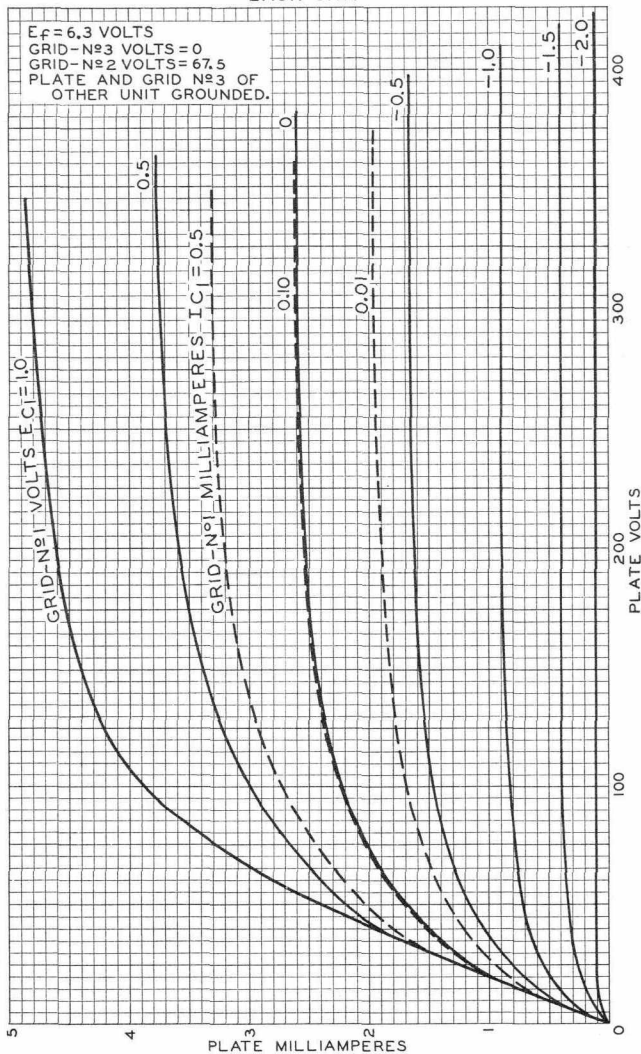
← Indicates a change.



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AVERAGE PLATE CHARACTERISTICS EACH UNIT



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AVERAGE PLATE CHARACTERISTICS EACH UNIT

$E_f = 6.3$ VOLTS
GRID-Nº2 VOLTS = 67.5
GRID-Nº1 MILLIAMPERES = 0.1
PLATE AND GRID Nº3 OF
OTHER UNIT GROUNDED.

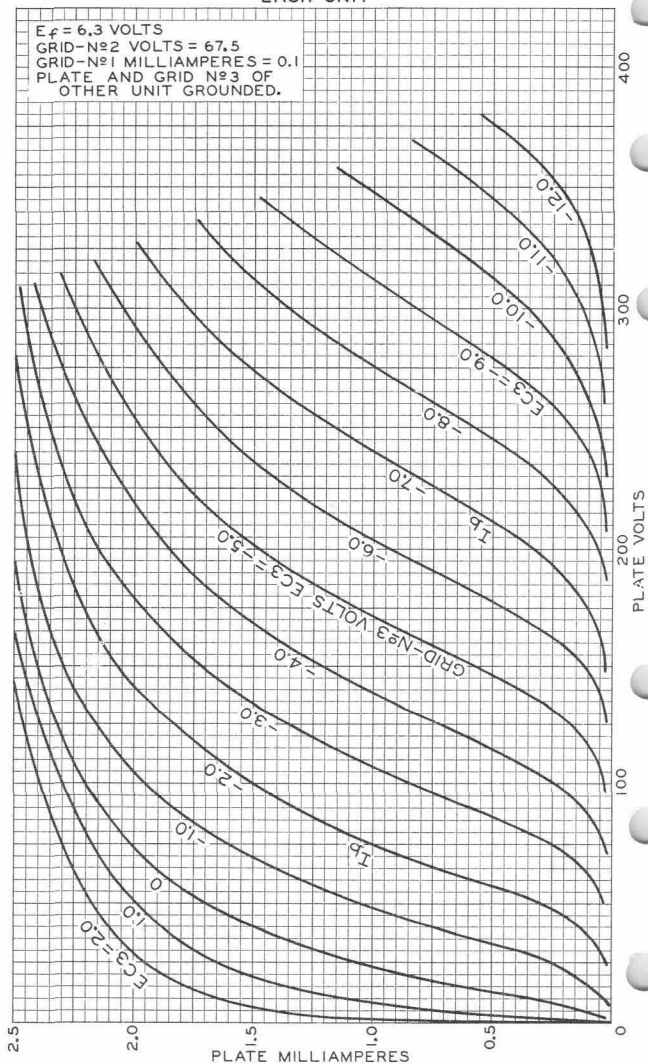


PLATE MILLIAMPERES

PLATE VOLTS

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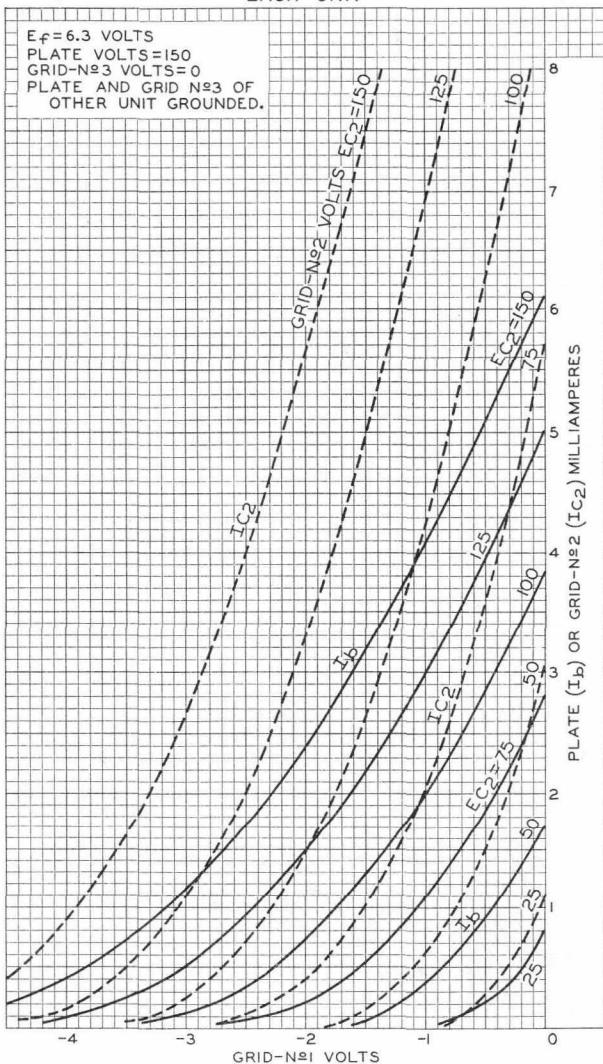
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AVERAGE CHARACTERISTICS
EACH UNIT

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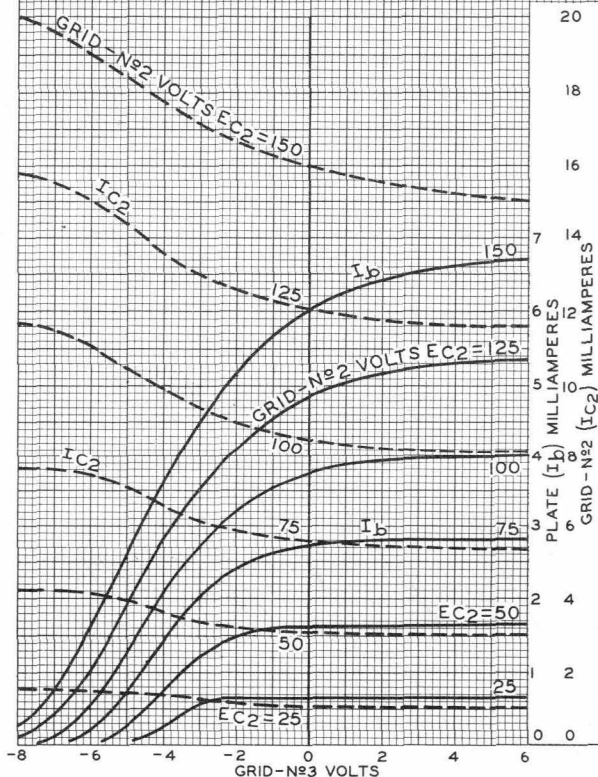
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AVERAGE CHARACTERISTICS EACH UNIT

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



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