



6DR7

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# DUAL TRIODE

## With High-Mu Unit and Low-Mu Unit

9-PIN MINIATURE TYPE

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathodes:

Voltage. . . . .	6.3 ± 10%	. . . . .	ac or dc volts
Current. . . . .	0.9	. . . . .	amp

Direct Interelectrode Capacitances (Approx.):<sup>o</sup>

	Unit No. 1	Unit No. 2	
Grid to plate. . . . .	4.5	8.5	μμf
Grid to cathode and heater . . .	2.2	5.5	μμf
Plate to cathode and heater. . .	0.34	1	μμf

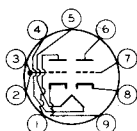
#### Characteristics, Class A<sub>1</sub> Amplifier:

	Unit No. 1	Unit No. 2	
Plate Voltage. . . . .	250	150	volts
Grid Voltage . . . . .	-3	-17.5	volts
Amplification Factor . . . . .	68	6	
Plate Resistance (Approx.) . . . .	40000	925	ohms
Transconductance . . . . .	1600	6500	μmhos
Plate Current. . . . .	1.4	35	ma
Plate Current for plate volts = 60 and grid volts = 0 . . . . .	-	80	ma
Plate Current for grid volts = -24. .	-	10	ma
Grid Voltage (Approx.) for plate μa = 10. . . . .	-5.5	-	volts
Grid Voltage (Approx.) for plate μa = 50. . . . .	-	-44	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" ± 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 . . . . .	. . . . .	9HF

- Pin 1 - Plate of Unit No. 2
- Pin 2 - Grid of Unit No. 2
- Pin 3 - Grid of Unit No. 2
- Pin 4 - Heater
- Pin 5 - Heater



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



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## DUAL TRIODE

### With High-Mu Unit and Low-Mu Unit

#### VERTICAL-DEFLECTION OSCILLATOR

*Values are for Unit No. 1*

##### Maximum Ratings, Design-Maximum Values:

*For operation in a 525-line, 30-frame system<sup>o</sup>*

DC PLATE VOLTAGE . . . . .	330 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE . . . . .	400 max.	volts
CATHODE CURRENT:		
Peak . . . . .	70 max.	ma
Average. . . . .	20 max.	ma
PLATE DISSIPATION. . . . .	1 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 <sup>■</sup> max.	volts

##### Maximum Circuit Values:

Grid-Circuit Resistance:

  For grid-resistor-bias or cathode-

  bias operation . . . . . 2.2 max. megohms

#### VERTICAL-DEFLECTION AMPLIFIER

*Values are for Unit No. 2*

##### Maximum Ratings, Design-Maximum Values:

*For operation in a 525-line, 30-frame system<sup>o</sup>*

DC PLATE VOLTAGE . . . . .	275 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE <sup>#</sup> . . . . .	1500 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE . . . . .	250 max.	volts
CATHODE CURRENT:		
Peak . . . . .	175 max.	ma
Average. . . . .	50 max.	ma
PLATE DISSIPATION. . . . .	7 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

##### Maximum Circuit Values:

Grid-Circuit Resistance:

  For grid-resistor-bias or cathode-

  bias operation . . . . . 2.2 max. megohms

<sup>o</sup> Without external shield.

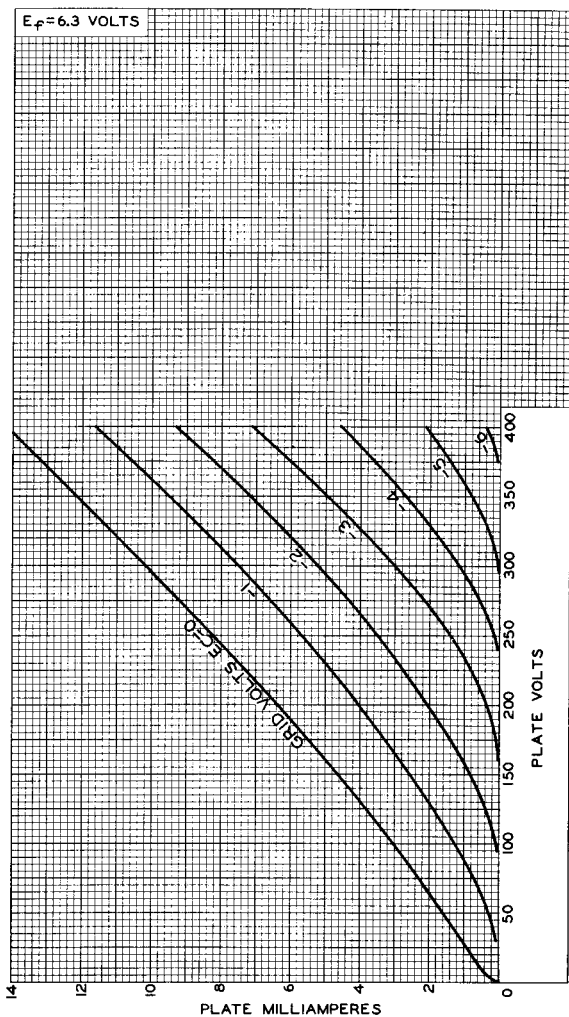
<sup>•</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

<sup>#</sup> This rating is applicable where the duration<sup>1</sup> of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

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

# AVERAGE PLATE CHARACTERISTICS

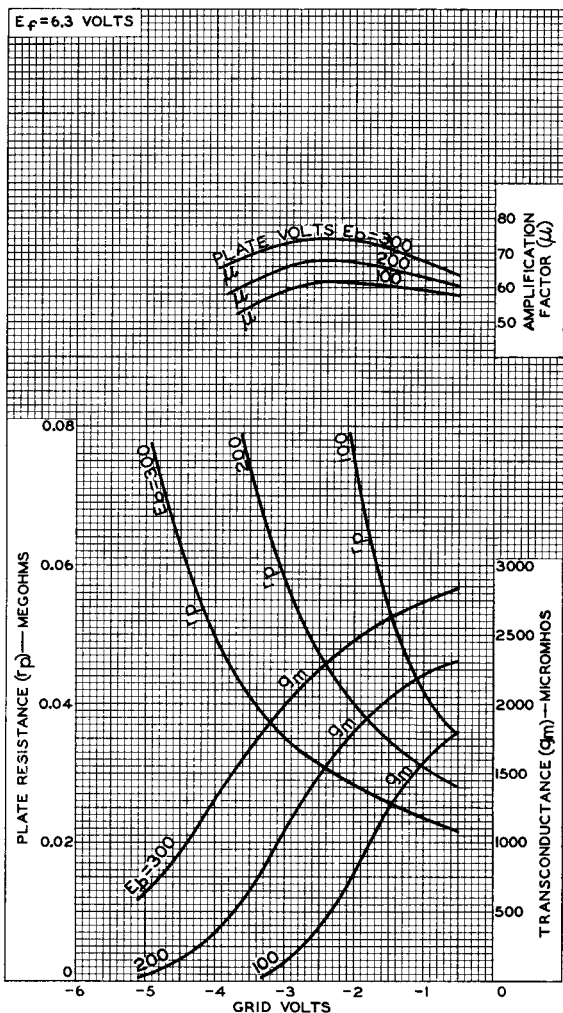
## Unit No.1



92CM-9917



## AVERAGE CHARACTERISTICS Unit No.1



92CM-9915RI



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### AVERAGE PLATE CHARACTERISTICS UNIT No 2

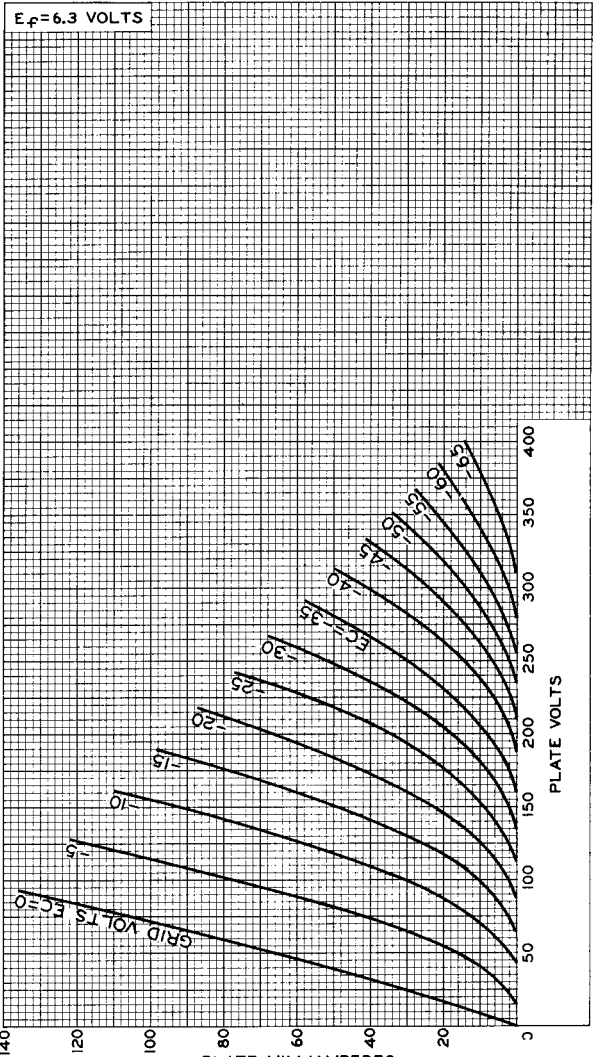


PLATE MILLIAMPERES  
ELECTRON TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-991?

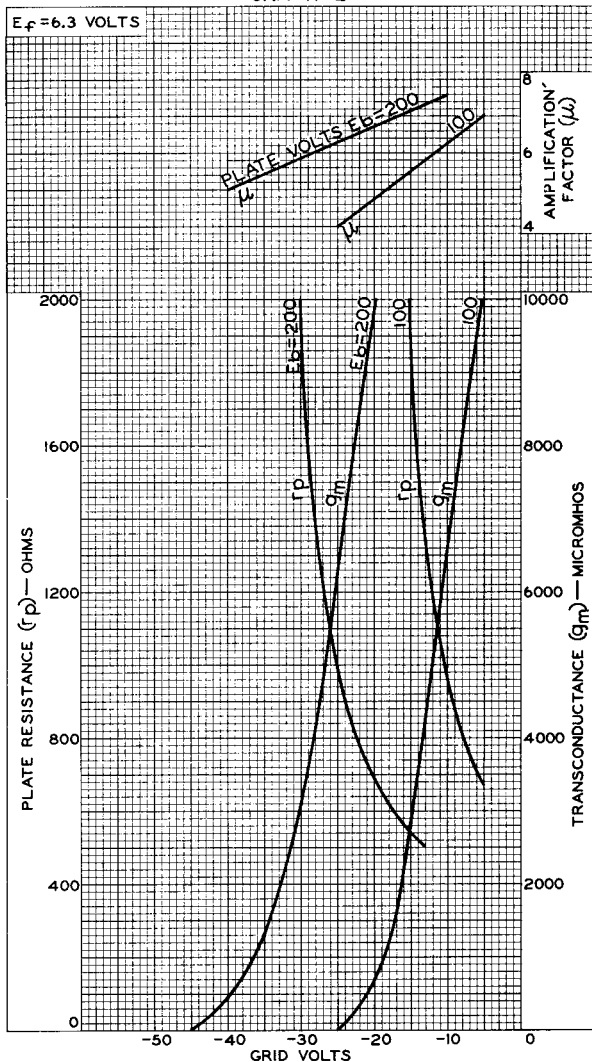
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# AVERAGE CHARACTERISTICS

UNIT No 2



ELECTRON TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-9914