Dual Triode

With Medium-Mu Unit and Low-Mu Unit

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings *(Design-Maximum Values):*			
Voltage (AC or DC)	6.3 ± 0.6		volts
Current at heater volts = 6.3	0.900		amp
Peak heater-cathode voltage (Each unit):			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[a]	max.	volts

Direct Interelectrode Capacitances (Approx.):[b]

	Unit No.1	*Unit No.2*	
Grid to plate	4.0	8.5	μμf
Grid to cathode and heater	2.2	5.5	μμf
Plate to cathode and heater	0.52	1.0	μμf

Characteristics, Class A_1 Amplifier:

	Unit No.1	*Unit No.2*		
Plate Voltage	250	60	150	volts
Grid Voltage	-11	0	-17.5	volts
Amplification Factor	17.5	–	6	
Plate Resistance (Approx.)	8750	–	925	ohms
Transconductance	2000	–	6500	μmhos
Plate Current	5.5	80[c]	35	ma
Plate Current for grid volts = -24	–	–	10	ma
Grid Voltage (Approx.) for plate μa = 10	-20	–	–	volts
Grid Voltage (Approx.) for plate μa = 50	–	–	-44	volts

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
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)

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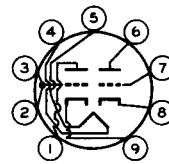
Basing Designation for BOTTOM VIEW. 9HF

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

VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[d]

DC PLATE VOLTAGE	330 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	400 max.	volts
CATHODE CURRENT:		
Peak	77 max.	ma
Average	22 max.	ma
→ PLATE DISSIPATION	1.5 max.	watts

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[d]

DC PLATE VOLTAGE	275 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[#]	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

Maximum Circuit Values:

Grid-Circuit Resistance:		
For grid-resistor-bias or cathode-bias operation	2.2 max.	megohms

[a] The dc component must not exceed 100 volts.

[b] Without external shield.

[c] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

→ Indicates a change.

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DUAL TRIODE

With Medium-Mu Unit and Low-Mu Unit

* This rating is applicable when the duration 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.

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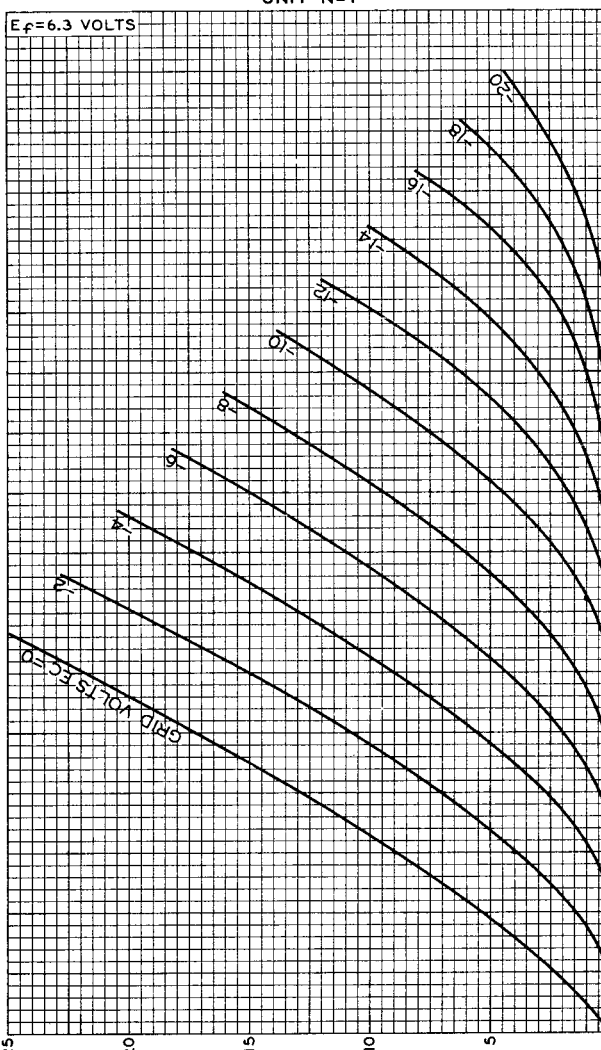
AVERAGE PLATE CHARACTERISTICS

UNIT Nº1



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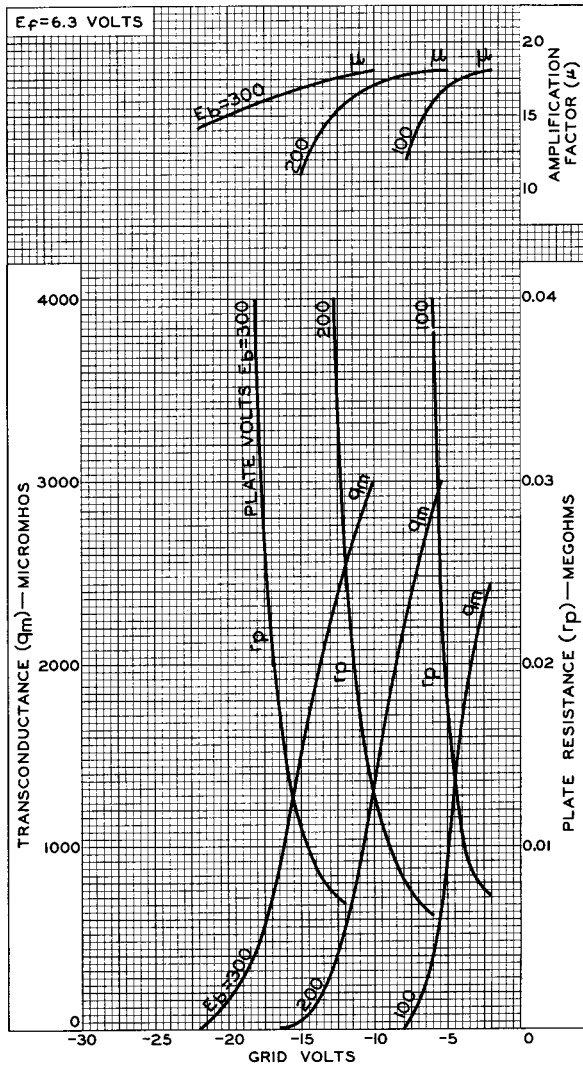
AVERAGE CHARACTERISTICS

UNIT Nº 1



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RCA

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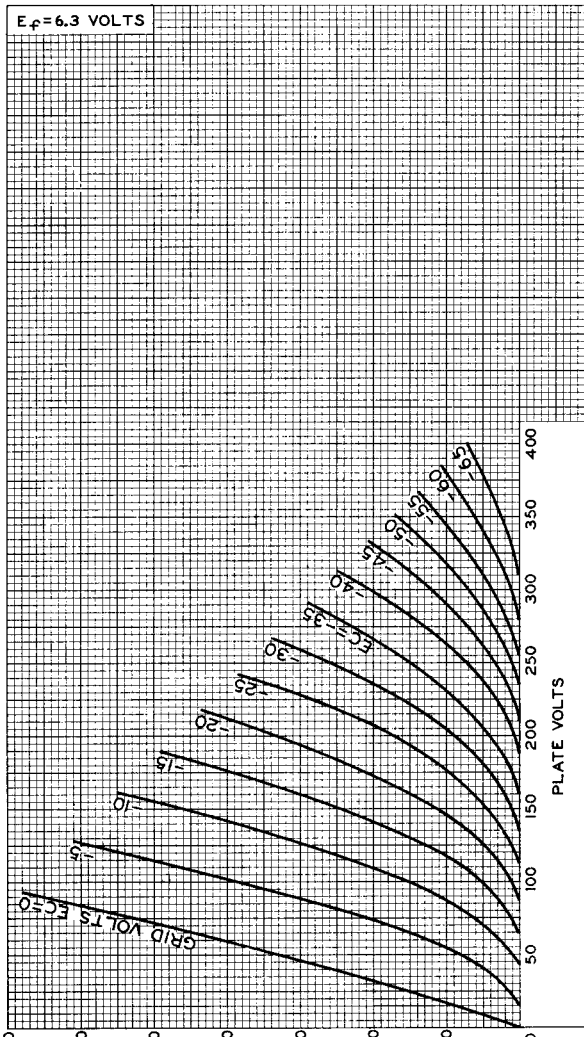
AVERAGE PLATE CHARACTERISTICS
UNIT Nº 2



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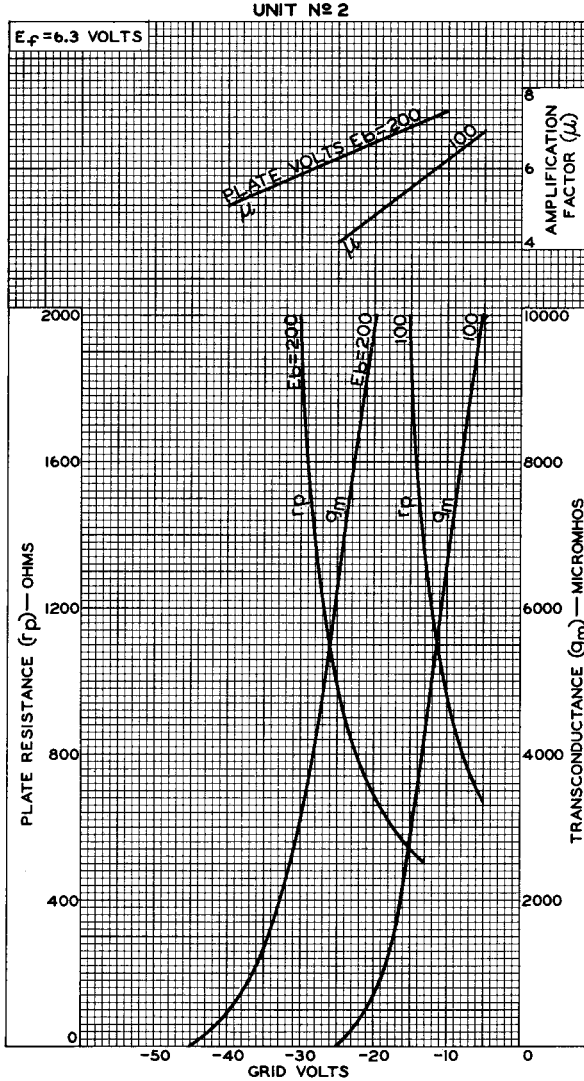
AVERAGE CHARACTERISTICS
UNIT Nº 2



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DUAL TRIODE

With Medium-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.):[o]

	Unit No.1	Unit No.2	
Grid to plate	4	8.5	μμf
Grid to cathode and heater	2.2	5.5	μμf
Plate to cathode and heater	0.52	1	μμf

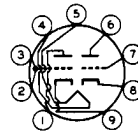
Characteristics, Class A_1 Amplifier:

	Unit No.1	Unit No.2		
Plate Voltage	250	60	150	volts
Grid Voltage	-11	0	-17.5	volts
Amplification Factor	17.5	-	6	
Plate Resistance (Approx.)	8750	-	925	ohms
Transconductance	2000	-	6500	μmhos
Plate Current	5.5	80*	35	ma
Plate Current for grid voltage of -24 volts	-	-	10	ma
Grid Voltage (Approx.) for plate current of 10 μa.	-20	-	-	volts
Grid Voltage (Approx.) for plate current of 50 μa.	-	-	-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 Medium-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□

DC PLATE VOLTAGE	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	400	max.	volts
CATHODE CURRENT:			
Peak	77	max.	ma
Average	22	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▲	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□

DC PLATE VOLTAGE	275	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE#	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▲	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For grid-resistor-bias or cathode-bias operation	2.2	max.	megohms

° Without external shield.

* This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

⊕ In stages operating with grid-resistor bias, an adequate cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.

▲ The dc component must not exceed 100 volts.

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