6KV8

High-Mu Triode—Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE **FRAME-GRID CONSTRUCTION**

For Use as a Combined Voltage Amplifier and Video Output Tube in TV Receivers

ELECTRICAL

Heater Characteristics and Ratings		
Voltage (AC or DC)	6.3 ± 0.6	V
Current at heater volts = 6.3	0.775	A
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200	V
Heater positive with respect to cathode	200[a]	V
Direct Interelectrode Capacitances[b]		
Triode Unit:		
Grid to plate	3.7	pF
Grid to cathode, pentode cathode, pentode grid No.3 & internal shield, and heater	2.5	pF
Plate to cathode, pentode cathode, pentode grid No.3 & internal shield, and heater	2.4	pF
Triode grid to pentode plate	0.015 max	pF
Pentode Unit:		
Grid No.1 to plate	0.12 max	pF ←
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	13.0	pF
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	4.8	pF
Pentode plate to triode plate	0.17 max	pF

Characteristics, Class A_1 Amplifier

	Triode Unit	*Pentode Unit*		
Plate Supply Voltage	-	125	200	V
Plate Voltage	200	-	-	V
Grid-No.2 Supply Voltage	-	125	125	V
Grid-No.1 Supply Voltage	-2	-	-	V
Cathode Resistor	-	82	68	Ω
Amplification Factor	70	-	-	
Plate Resistance (Approx.)	17500	55000	75000	Ω
Transconductance	4000	21000	23000	μmho
Plate Current	4	16.5	20	mA ←
Grid-No.2 Current	-	3.1	3.5	mA ←
Grid-No.1 Voltage (Approx.) for plate current = 100 μA	-4.5	-4.2	-4.2	V

← Indicates a change.

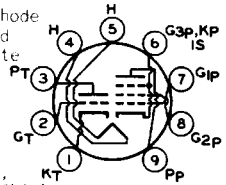
6KV8

MECHANICAL

Operating Position	Any
Maximum Overall Length	2-5/8 in
Maximum Seated Length	2-3/8 in
Length, Base Seat to Bulb Top (Excluding tip)	2 ± 3/32 in
Diameter	0.750 to 0.875 in
Dimensional Outline	See *General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)

BASING DIAGRAM (Bottom View)

Pin 1 – Triode Cathode
Pin 2 – Triode Grid
Pin 3 – Triode Plate
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Pentode Cathode, Pentode Grid No.3, Internal Shield
Pin 7 – Pentode Grid No.1
Pin 8 – Pentode Grid No.2
Pin 9 – Pentode Plate



9DX

AMPLIFIER — Class A_1

Design-Maximum Ratings

	Triode Unit	*Pentode Unit*	
Plate Voltage	300	300 max	V
Grid-No.2 (Screen-Grid) Supply Voltage	-	300 max	V
Grid-No.2 Voltage	-	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
Grid-No.1 (Control-Grid) Voltage			
Positive-bias value	0	0 max	V
Grid-No.2 Input			
For grid-No.2 voltages up to 150 V.	-	1 max	W
For grid-No.2 voltages between 150 and 300 V.	-	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
Plate Dissipation	1	5 max	W

Maximum Circuit Values

	Triode Unit	*Pentode Unit*	
Grid-No.1-Circuit Resistance			
For fixed-bias operation	0.5	0.1 max	MΩ
For cathode-bias operation	1	0.25 max	MΩ

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

[b] Without external shield.

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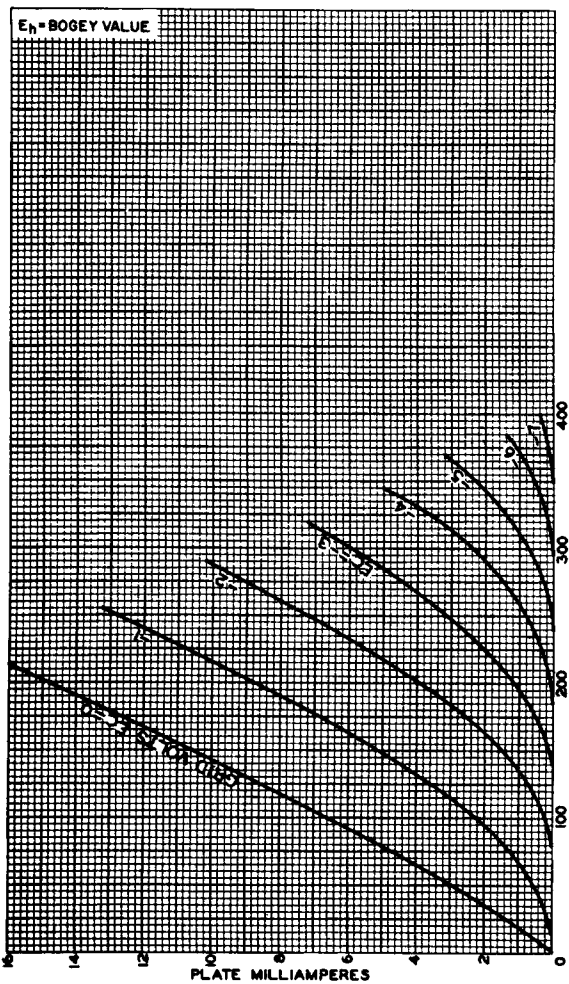
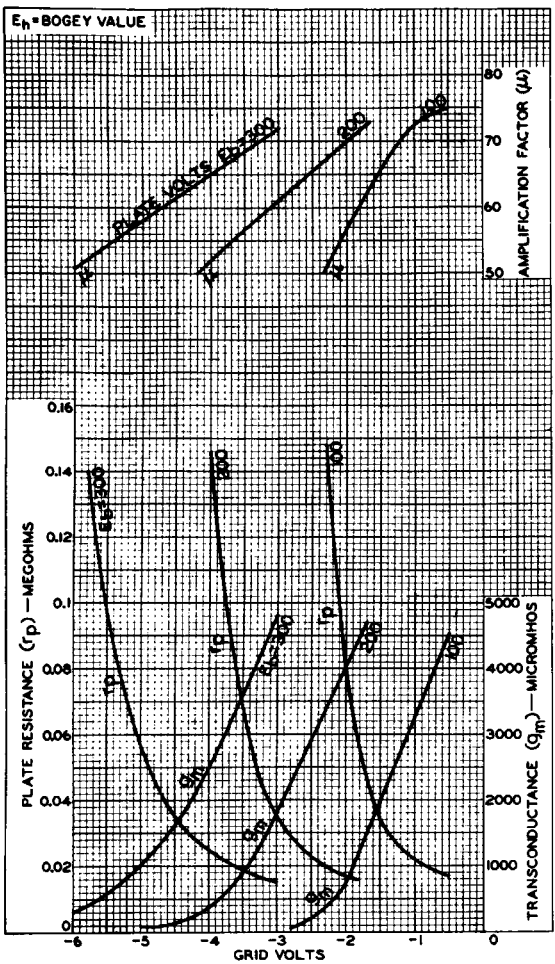
Average Plate Characteristics
Triode Unit



Average Characteristics
Triode Unit



92CM-10874RI

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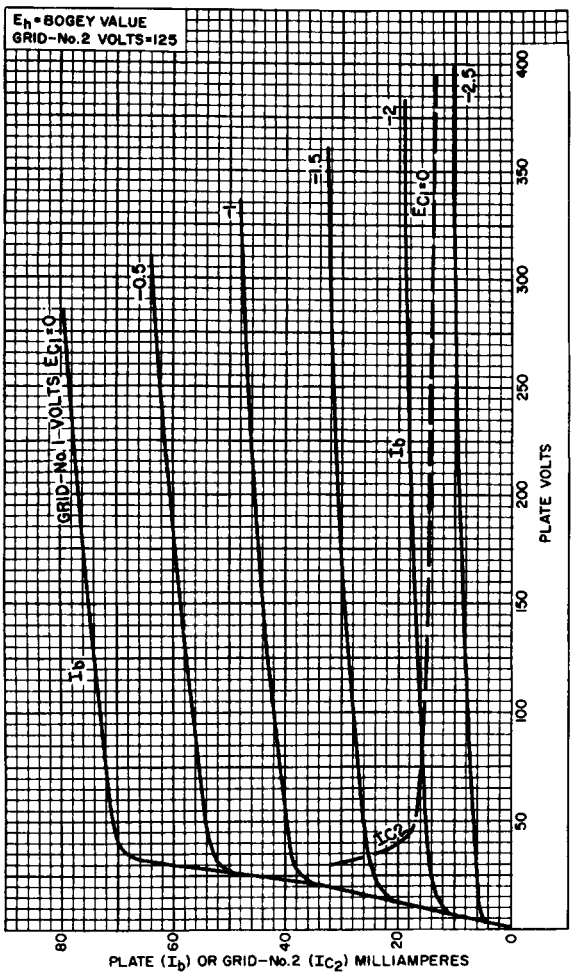
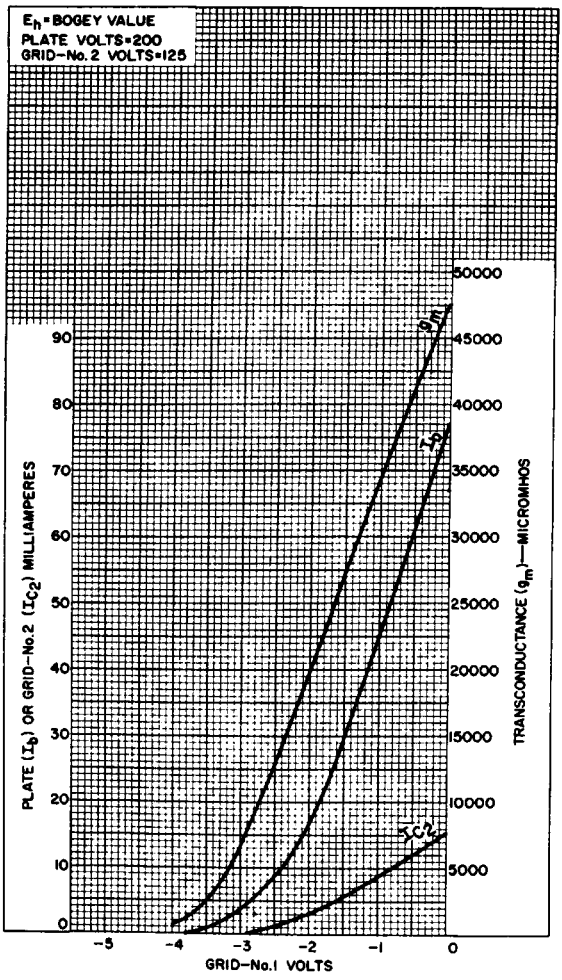
Average Characteristics
Pentode Unit



92CM-11946R2

Average Characteristics
Pentode Unit



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