6LM8

Medium-Mu Triode—
Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE

SEPARATE CATHODE BASE-PIN CONNECTIONS

For Color and Black-and-White TV Receivers. Pentode Unit is Particularly Suited for Burst-Amplifier Circuit in Color TV. Triode Unit is Useful as a General-Purpose Amplifier.

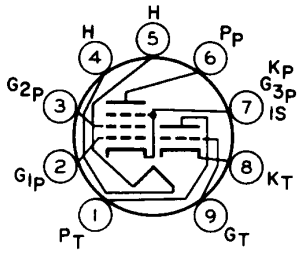
Electrical:

Heater Characteristics and Ratings:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.450	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:[b]		
Triode Unit:		
Grid to plate	1.8	pf
Input: G_T to (K_T,K_P+$G3_P$+IS,H)	3.2	pf
Output: P_T to (K_T,K_P+$G3_P$+IS,H)	1.9	pf
Pentode Unit:		
Grid No.1 to plate	0.015 max.	pf
Input: $G1_P$ to (K_P+$G3_P$+IS,$G2_P$,H)	5.5	pf
Output: P_P to (K_P+$G3_P$+IS,$G2_P$,H)	3.8	pf
Heater to cathode (Each unit)	3.2	pf

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length from Base Seat to Bulb Top (Excluding Tip)	1-9/16" ±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	9AE

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



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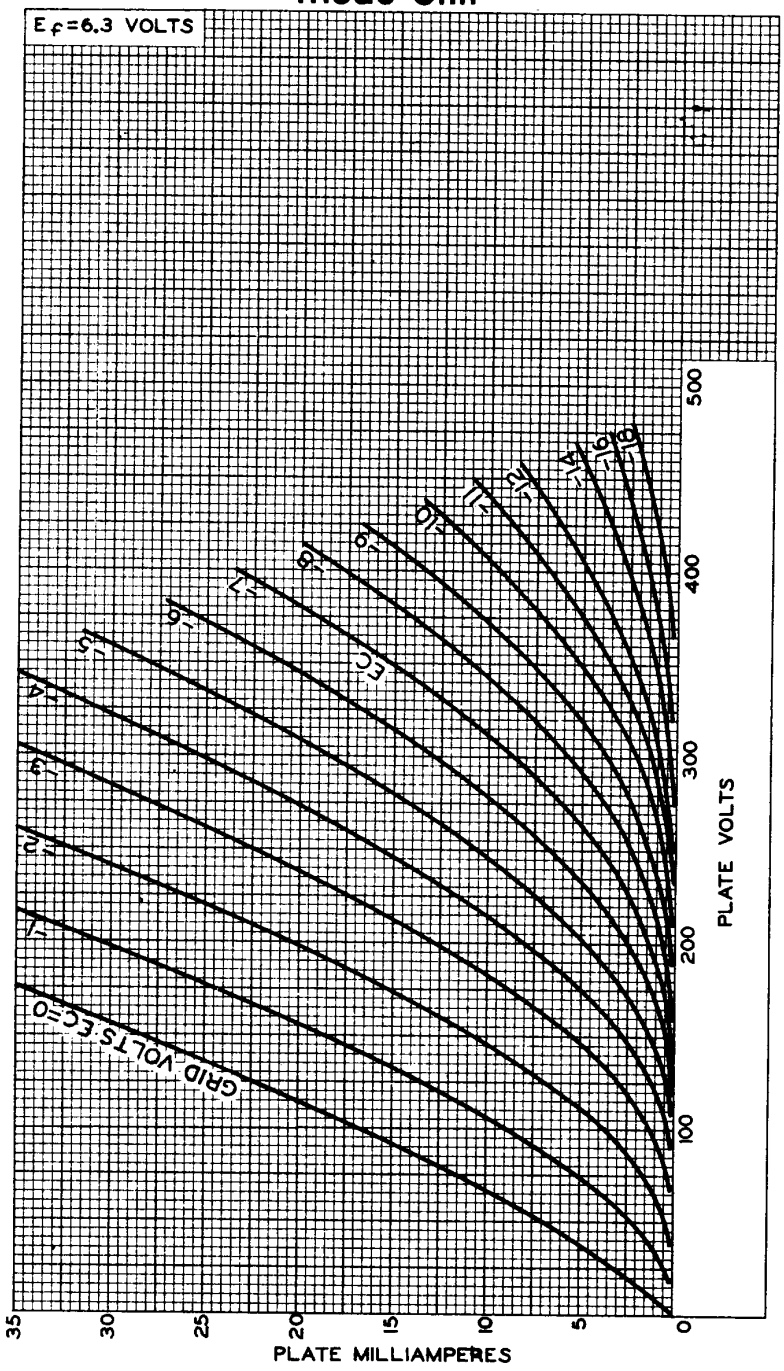
AMPLIFIER — Class A[1]

	Triode Unit	*Pentode Unit*	
Characteristics:			
Plate Voltage	125	125	volts
Grid-No.2 Voltage	–	125	volts
Grid-No.1 Voltage	-1	-2	volts
Amplification Factor	46	–	
Plate Resistance (Approx.)	5400	150000	ohms
Transconductance	8500	6000	μmhos
Plate Current	13.5	12	ma
Grid-No.2 Current	–	4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 10	-8	-14	volts
Maximum Ratings, *Design-Maximum Values:*			
Plate Voltage	330 max.	350 max.	volts
Grid-No.2 (Screen-Grid) Supply Voltage	–	330 max.	volts
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 max.	0 max.	volts
Grid-No.2 Input: For grid-No.2 voltages up to 165 volts	–	0.55 max.	watt
For grid-No.2 voltages between 165 and 330 volts	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section		
Plate Dissipation	2.5 max.	2.5 max.	watts
Maximum Circuit Values:			
Grid-No.1-Circuit Resistance: For fixed-bias operation	0.5 max.	0.25 max.	megohm
For cathode-bias operation	1 max.	0.5 max.	megohm

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

[b] With external shield JEDEC No.315 measured in accordance with EIA Standard RS-191-A.

AVERAGE PLATE CHARACTERISTICS
Triode Unit



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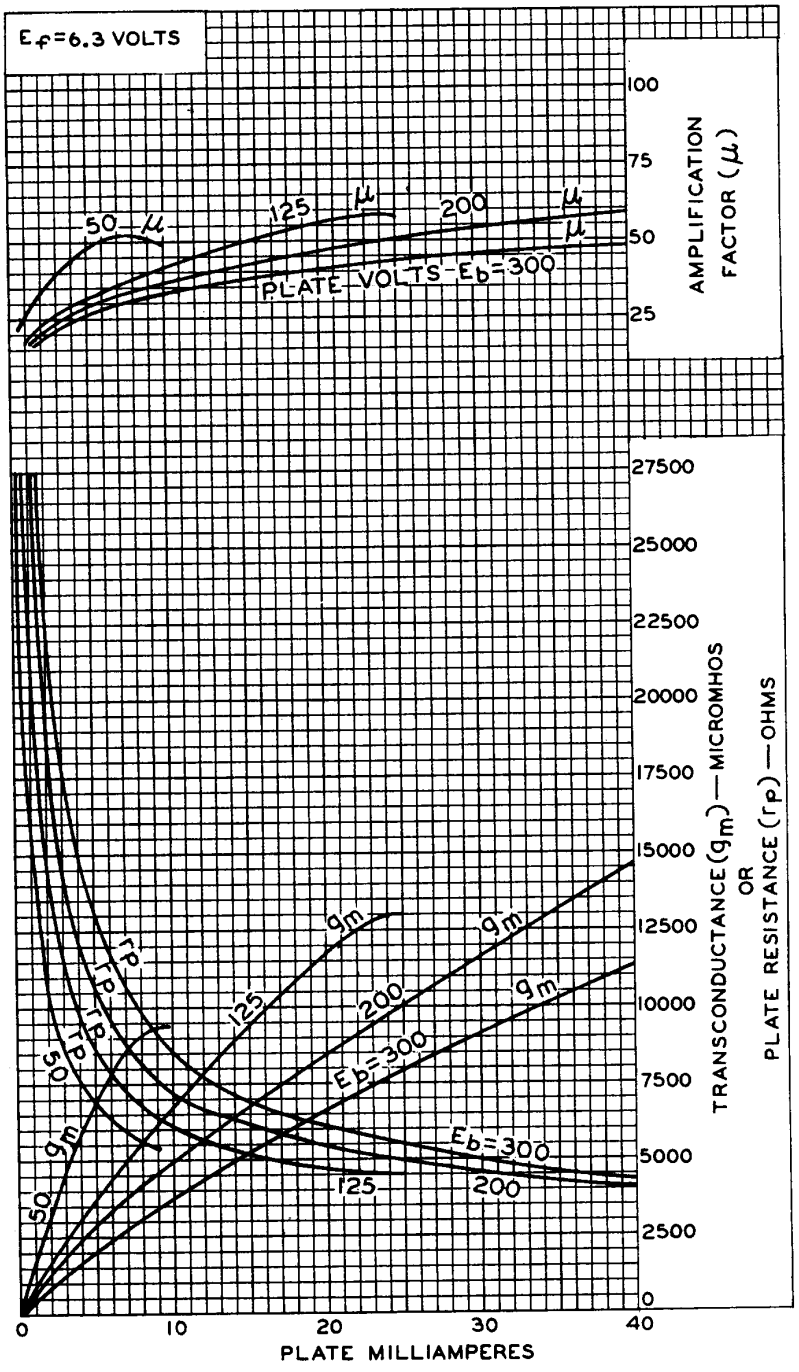
AVERAGE CHARACTERISTICS
Triode Unit



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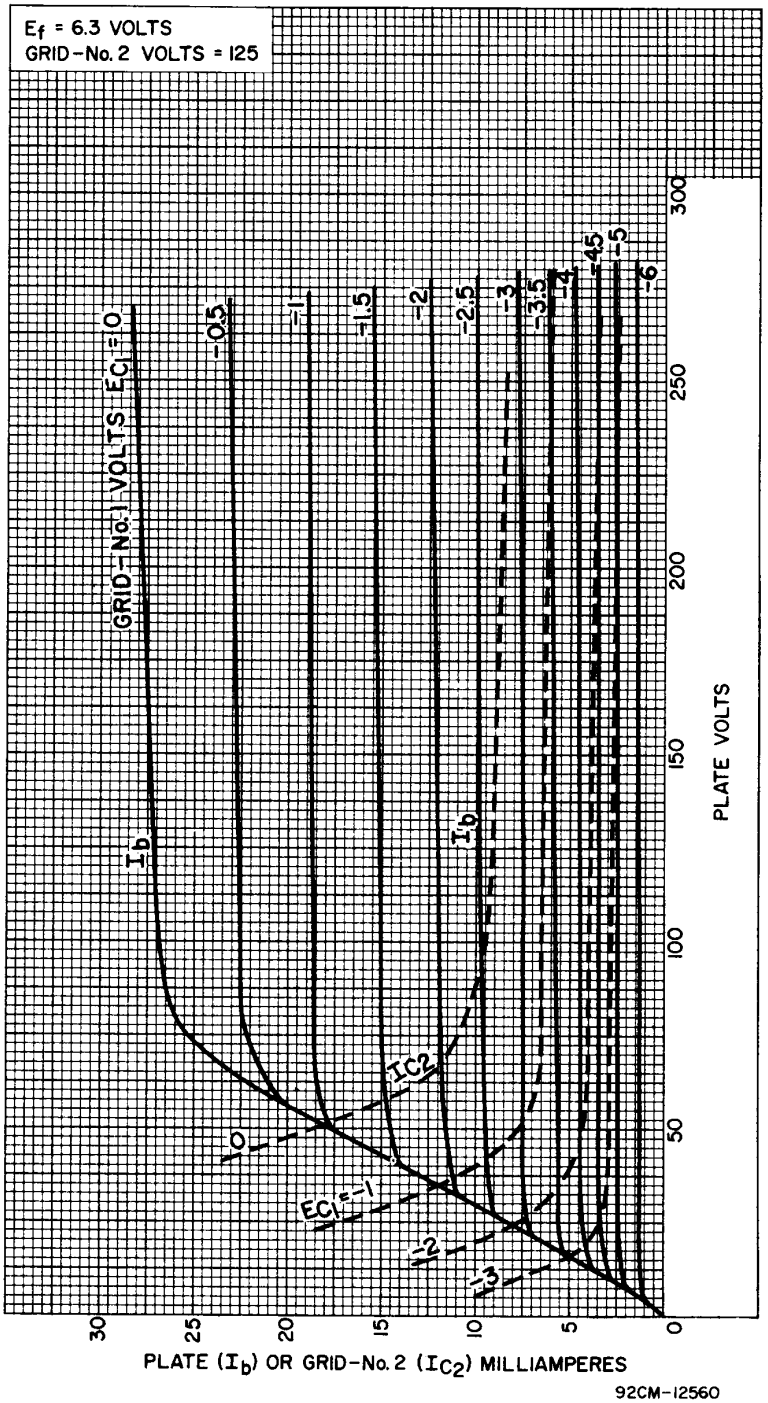
AVERAGE CHARACTERISTICS
Pentode Unit



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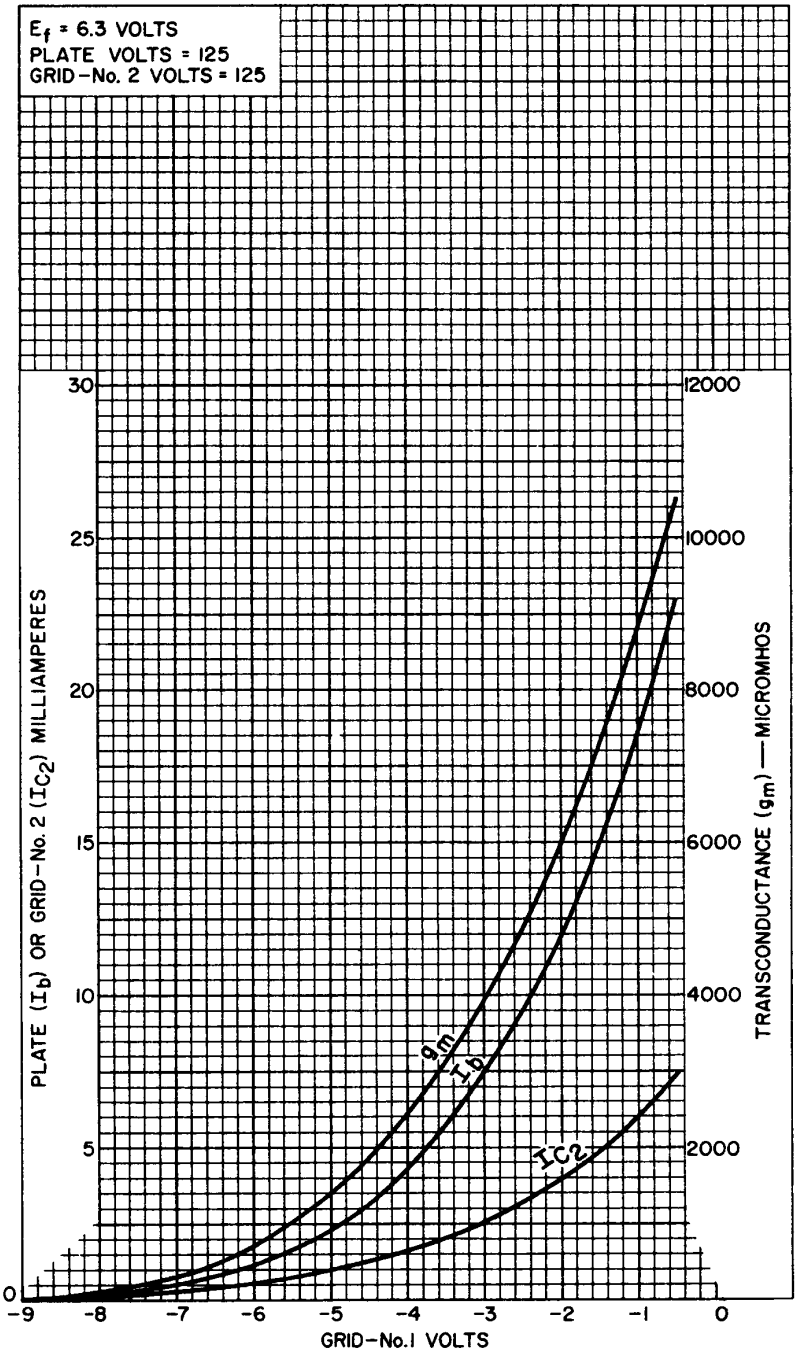
AVERAGE CHARACTERISTICS
Pentode Unit



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