

Medium-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

*For Use in Low-B+ Black-and-White TV Receivers
Having Low-Voltage Power Supplies*

ELECTRICAL CHARACTERISTICS

Bogey Values^a

Heater Voltage (AC or DC)	E _h	6.3	V
Heater Current.	I _h	0.775	A

Direct Interelectrode Capacitances

Without external shield

Triode Unit:

Grid to plate	C _{g-p}	2.8	pF
Input: G _T to (K _T , K _p +G _{3p} +I _S , H)	c _i	4.2	pF
Output: P _T to (K _T , K _p +G _{3p} +I _S , H)	c _o	2.4	pF

Pentode Unit:

Grid No.1 to plate.	C _{g1-p}	0.12 max	pF
Input: G _{1p} to (K _p +G _{3p} +I _S , G _{2p} , H)	c _i	14	pF
Output: P _p to (K _p +G _{3p} +I _S , G _{2p} , H)	c _o	4.8	pF
Triode grid to pentode plate.	-	0.015 max	pF
Pentode plate to triode plate	-	0.17 max	pF

For the following characteristics, see Conditions

		Triode Unit	Pentode Unit	
Amplification Factor.	μ	46	-	-
Plate Resistance (Approx.).	r _p	4400	55000	75000 Ω
Transconductance.	g _m	10400	21000	23000 μ mho
DC Plate Current.	I _b	15	16.5	20 mA
DC Grid-No.2 Current.	I _{c2}	-	3.1	3.5 mA
Cutoff DC Grid-No.1 Voltage	E _{c1} (c _o)	-6	-4.2	-4.2 V

Plate μ A = 100

Conditions

		Bogey value		
Heater Voltage.	E _h	125	125	200 V
DC Plate Supply Voltage	E _{bb}	-	125	125 V
DC Grid-No.2 Supply Voltage	E _{cc2}	-	125	125 V
Grid No.1	-	Connected to negative end of R _k		
Cathode Resistor.	R _k	68	82	68 Ω

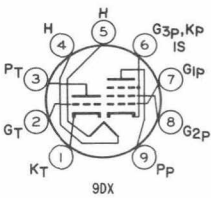
MECHANICAL CHARACTERISTICS

Operating Position.	Any
Type of Cathodes.	Coated Unipotential
Maximum Overall Length.	2.625 in
Maximum Seated Length	2.375 in
Maximum Diameter.	0.875 in
Dimensional Outline	See General Section
Envelope.	JEDEC T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC E9-1)



TERMINAL DIAGRAM (Bottom View)

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



DESIGN-MAXIMUM RATINGS

For operation as a Class A₁ Amplifier Tube

		Triode Unit	Pentode Unit	
DC Plate Voltage.	E _b	300	300	V
DC Grid-No.2 (Screen-Grid) Supply Voltage	E _{cc2}	-	300	V
DC Grid-No.2 Voltage.	E _{c2}	-	See Grid-No.2 Input Rating Chart	
at front of Receiving Tube Section				
DC Grid-No.1 (Control-Grid) Voltage				
Positive-bias value	E _{c1}	0	0	V
Heater-Cathode Voltage				
Peak.	e _{hkm}	±200		V
Average ^b	E _{hk(av)}	100		V
Heater Voltage (AC or DC) . . .	E _h	5.7 to 6.9		V
Grid-No.2 Input	P _{g2}			
For E _{c2} ≤ 150 V	-	-	1	W
For E _{c2} ≥ 150 V and ≤ 300 V .	-	-	See Grid-No.2 Input Rating Chart	
at front of Receiving Tube Section				
Plate Dissipation	P _b	2	5	W

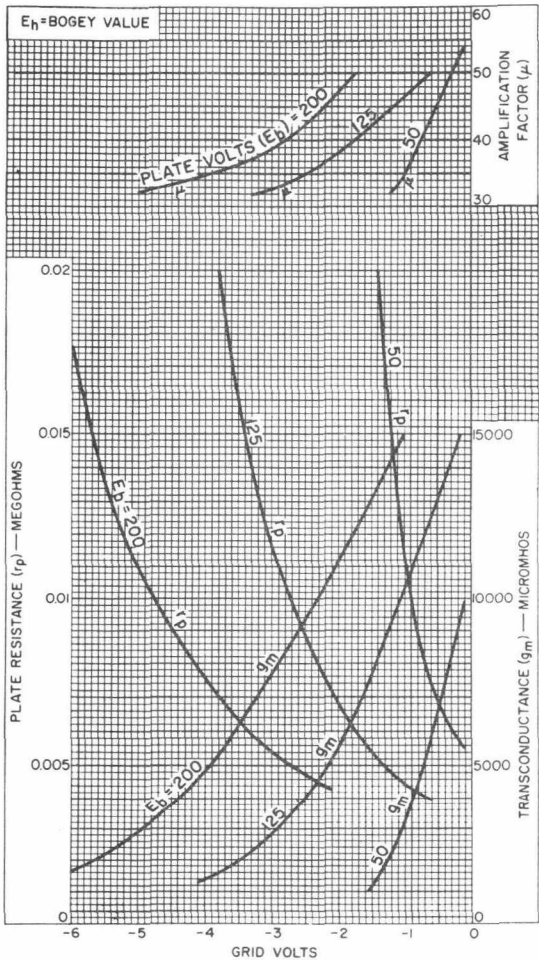
MAXIMUM CIRCUIT VALUES

		Triode Unit	Pentode Unit	
Grid-No.1 Circuit Resistance	R _{g1(ckt)}			
For fixed-bias operation. . .	-	0.5	0.1	MΩ
For cathode-bias operation. .	-	1	0.25	MΩ

^a Unless otherwise specified.
^b Measured with a dc meter.



Typical Characteristics
Triode Unit



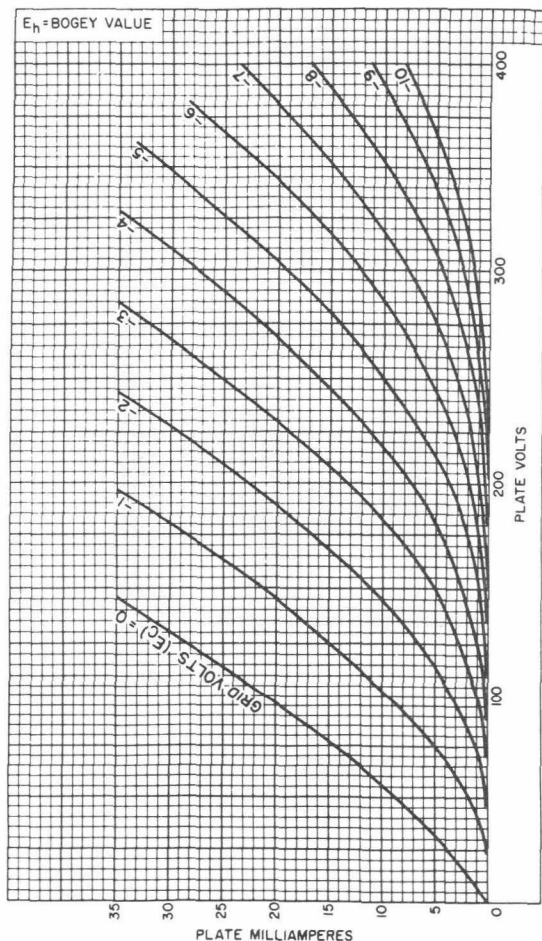
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Typical Plate Characteristics

Triode Unit

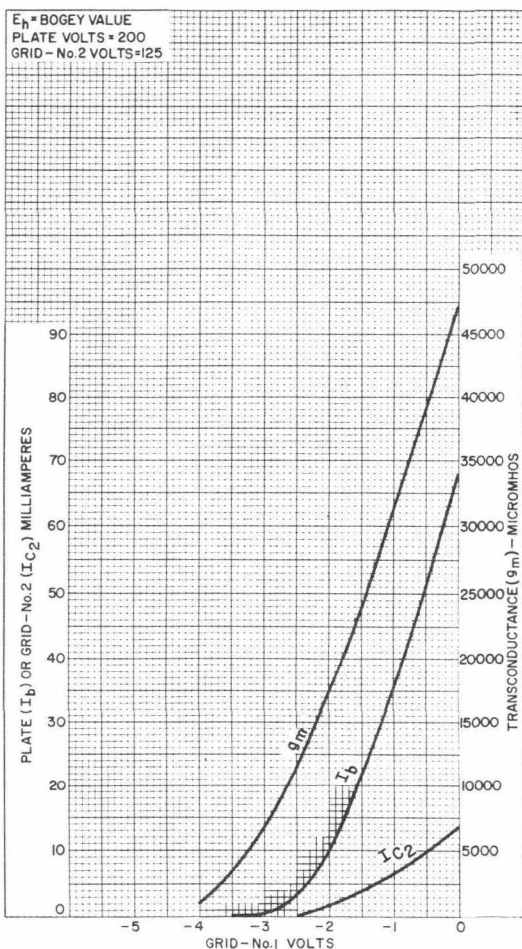


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Typical Characteristics

Pentode Unit



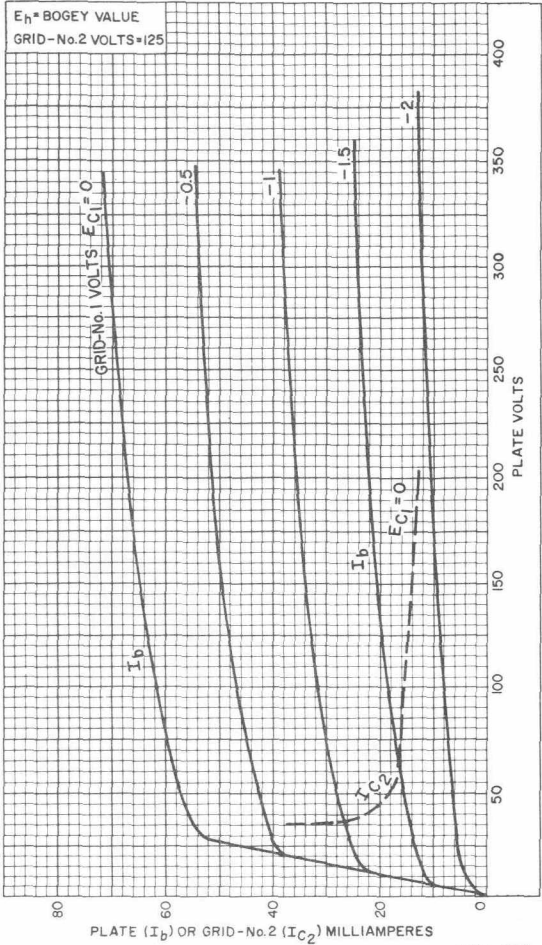
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DATA 3
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Typical Plate Characteristics
Pentode Unit



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