

# 6KZ8

## Medium-Mu Triode— Sharp-Cutoff Pentode

### 9-PIN MINIATURE TYPE

For Oscillator-Mixer Service in VHF TV-Tuner Applications

#### Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) . . . . .	6.3 <sup>a</sup>	6.3 ± 0.6	volts
Current . . . . .	0.450 ± 0.030	0.450 <sup>b</sup>	amp
Warm-up time (Average) . . . . .	11	-	sec

Peak heater-cathode voltage (Each Unit):

Heater negative with respect to cathode . . . . .	200	max.	volts
Heater positive with respect to cathode . . . . .	200 <sup>c</sup>	max.	volts

Direct Interelectrode Capacitances:<sup>d</sup>

*Triode Unit:*

G <sub>T</sub> to P <sub>T</sub> . . . . .	1.6	pf
Input: G <sub>T</sub> to (K <sub>T</sub> , G <sub>3P</sub> +K <sub>P</sub> +IS, H) . . . . .	3.2	pf
Output: P <sub>T</sub> to (K <sub>T</sub> , G <sub>3P</sub> +K <sub>P</sub> +IS, H) . . . . .	1.8	pf

*Pentode Unit:*

G <sub>1P</sub> to P <sub>P</sub> . . . . .	0.01	max.	pf
Input: G <sub>1P</sub> to (K <sub>P</sub> +G <sub>3P</sub> +IS, G <sub>2P</sub> , H) . . . . .	5.5		pf
Output: P <sub>P</sub> to (K <sub>P</sub> +G <sub>3P</sub> +IS, G <sub>2P</sub> , H) . . . . .	3.4		pf
Heater to cathode (Each Unit) . . . . .	3.2		pf

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

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Voltage . . . . .	125	125	volts
Grid-No.2 Voltage . . . . .	-	125	volts
Grid-No.1 Voltage . . . . .	-1	-1	volt
Amplification Factor . . . . .	46	-	
Plate Resistance (Approx.) . . . . .	5400	200000	ohms
Transconductance . . . . .	8500	7500	μmhos
Plate Current . . . . .	13.5	12	ma
Grid-No.2 Current . . . . .	-	4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 10 . . . . .	-8	-8	volts

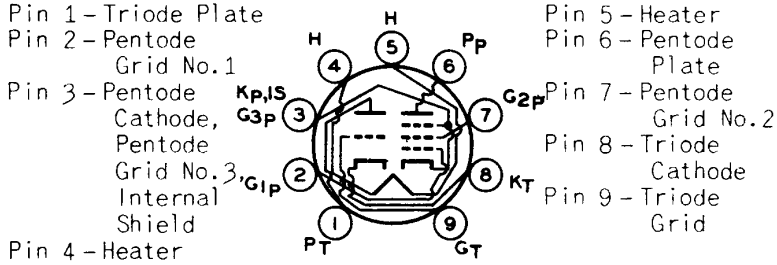
#### Mechanical:

Operating Position . . . . .	Any
Type of Cathodes . . . . .	Coated Unipotential
Maximum Overall Length . . . . .	2-3/16"
Maximum Seated Length . . . . .	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	1-9/16" ± 3/32"
Diameter . . . . .	0.750" to 0.875"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb . . . . .	T6-1/2
Base . . . . .	Small-Button Noval 9-Pin (JEDEC No. E9-1)



# 6KZ8

Basing Designation for BOTTOM VIEW. . . . . 9FZ



## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Voltage. . . . .	330 max.	330 max.	volts
Grid-No.2 (Screen-Grid) Supply Voltage . . . . .	-	330 max.	volts
Grid-No.2 Voltage. . . . .	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section		
Grid-No.1 (Control-Grid) Voltage:			
Positive-bias value. . . . .	0 max.	0 max.	volts
Plate Dissipation. . . . .	2.5 max.	2.5 max.	watts
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 <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section		

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:			
For fixed-bias operation. . . . .	0.25 max.	0.25 max.	megohm
For cathode-bias operation. . . . .	0.5 max.	0.5 max.	megohm

<sup>a</sup> At heater amperes = 0.450.

<sup>b</sup> At heater volts = 6.3.

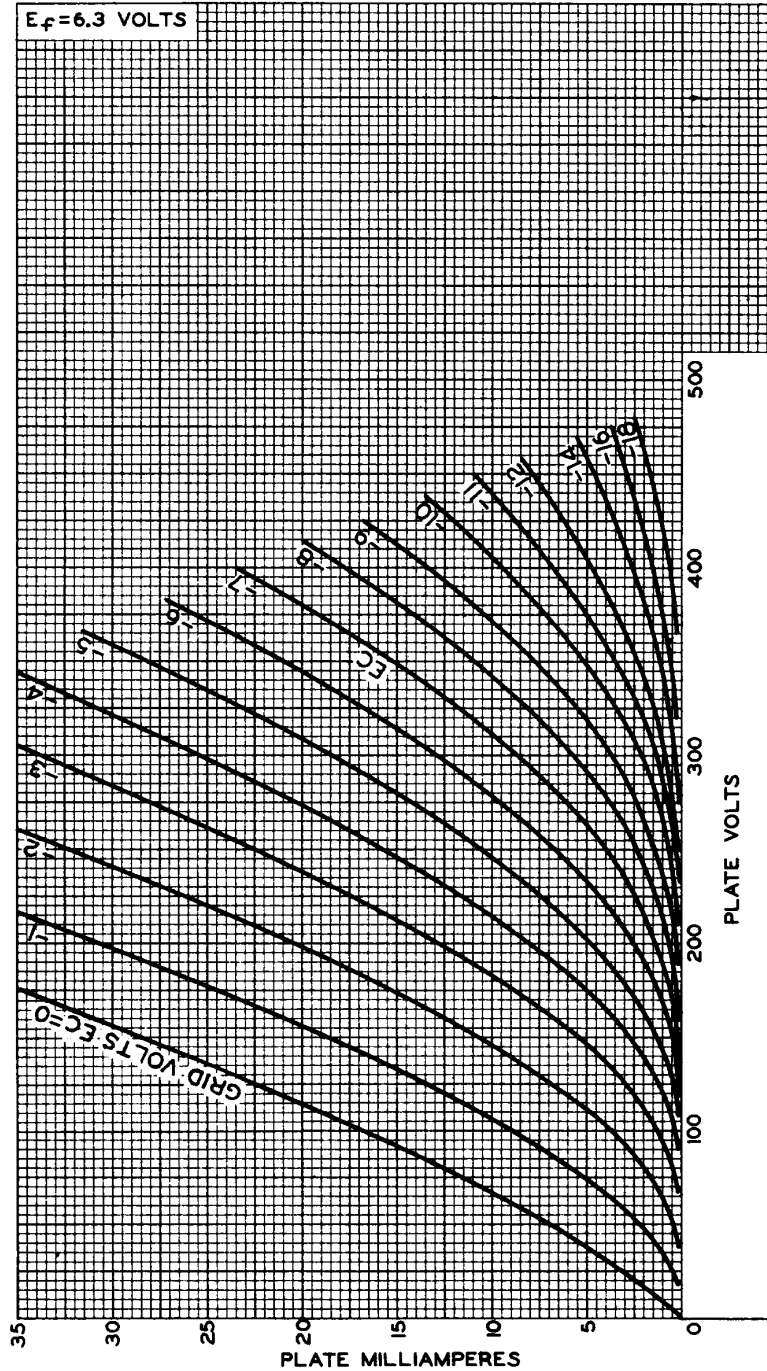
<sup>c</sup> The dc component must not exceed 100 volts.

<sup>d</sup> With external shield JEDEC No.315 connected to cathode of unit under test.



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## AVERAGE PLATE CHARACTERISTICS Triode Unit



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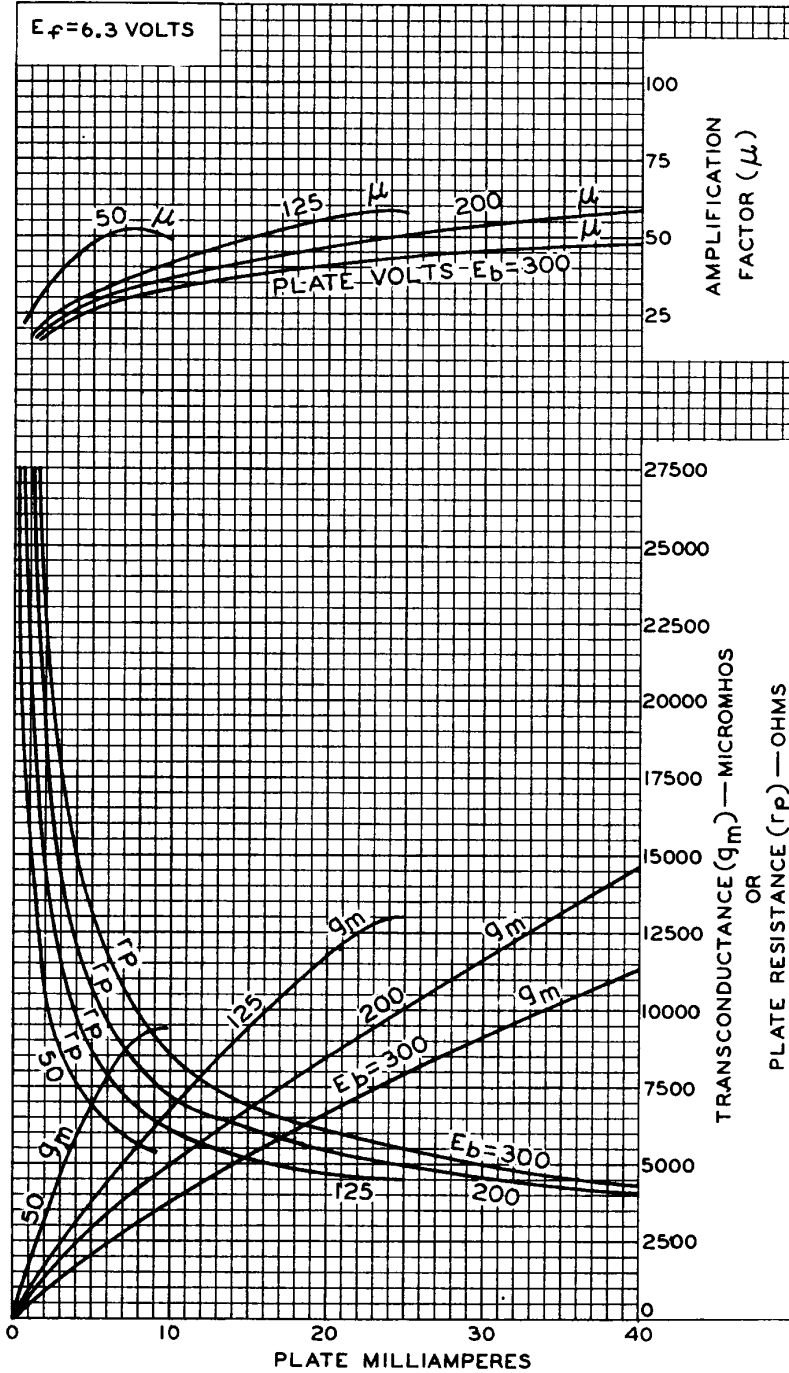


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DATA 2  
3-64

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## AVERAGE CHARACTERISTICS Triode Unit



ELECTRON TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

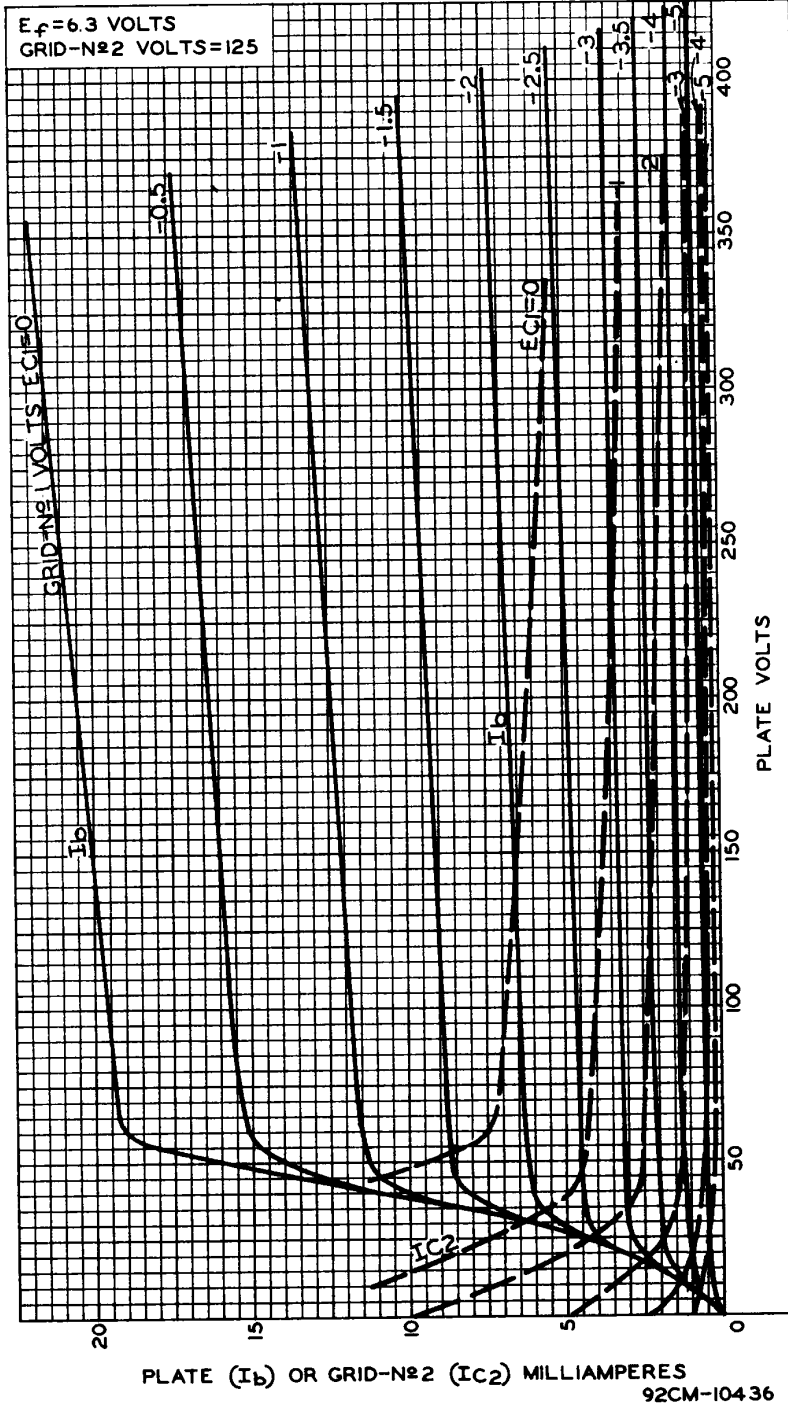
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6KZ8

AVERAGE CHARACTERISTICS  
Pentode Unit

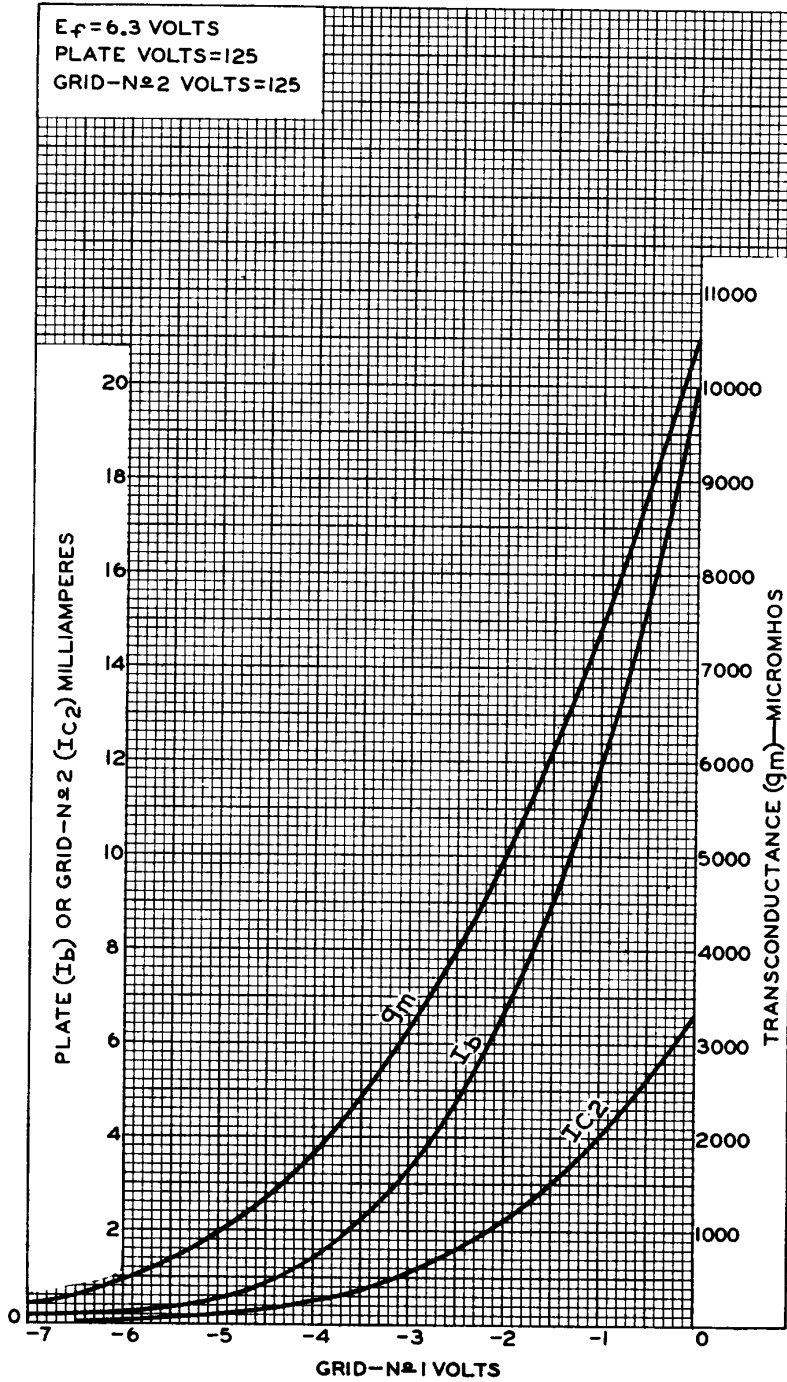


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DATA 3  
3-64

# 6KZ8

## AVERAGE CHARACTERISTICS Pentode Unit



92CM-10417

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