



6J8-G

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## TRIODE-HEPTODE CONVERTER

Heater ■ Coated Unipotential Cathode  
 Voltage 6.3 a-c or d-c volts  
 Current 0.3 amp.

## Direct Interelectrode Capacitances:

|                                                                    |                    |
|--------------------------------------------------------------------|--------------------|
| Heptode Grid #1 to Heptode Plate <sup>■</sup>                      | 0.01 max. $\mu$ f  |
| Heptode Grid #1 to Triode Plate <sup>■</sup>                       | 0.015 max. $\mu$ f |
| Heptode Grid #1 to Triode Grid & Heptode Grid #3                   | 0.13 $\mu$ f       |
| Triode Grid to Triode Plate                                        | 2.2 $\mu$ f        |
| Heptode Grid #1 to All Other Electrodes (R-F Input)                | 4.4 $\mu$ f        |
| Triode Plate to All Other Electrodes (Osc. Output)                 | 5.5 $\mu$ f        |
| Triode Grid & Heptode Grid #3 to All Other Electrodes (Osc. Input) | 11.7 $\mu$ f       |
| Heptode Plate to All Other Electrodes (Mixer Output)               | 8.8 $\mu$ f        |

Overall Length 4-7/32" to 4-15/32"

Seated Height 3-21/32" to 3-29/32"

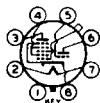
Maximum Diameter 1-9/16"

Bulb ST-12

Cap Skirted Miniature

Base Small Shell Octal 8-Pin

- Pin 1 - No Connection  
 Pin 2 - Heater  
 Pin 3 - Heptode Plate  
 Pin 4 - Heptode Grids #2 & #4



- Pin 5 - Triode Grid & Heptode Grid #3  
 Pin 6 - Triode Plate  
 Pin 7 - Heater  
 Pin 8 - Cathode

Mounting Position BOTTOM VIEW (G-8H) Any

CONVERTER SERVICE

Heptode Plate Voltage 250 max. volts

Heptode Screen (Grids #2 & #4) Voltage 100 max. volts

Triode Plate Supply Voltage\* 250 max. volts

Typical Operation and Characteristics:

Heptode Plate Voltage 100 250 volts

Heptode Screen Voltage 100 100 volts

Heptode Control-Grid Voltage (Grid #1) -3 -3 volts

Triode Plate Voltage 100 - volts

Triode Plate Supply Voltage\* - 250 volts

Triode Grid Resistor 50000 50000 ohms

Heptode Plate Resistance 0.9 4.0 approx. megohms

Conversion Transconductance 250 290  $\mu$ hos

Heptode Control-Grid Bias for Conversion Transcond. of 2  $\mu$ hos - -20 volts

Heptode Plate Current 1.4 1.3 ma.

Heptode Screen Current 3.0 2.9 ma.

Triode Plate Current 3.0 5.0 ma.

Triode Grid & Heptode Grid #3 Current 0.3 0.4 ma.

NOTE: The transconductance of the triode unit (not oscillating) is approximately 1600  $\mu$ hos under the following conditions: triode plate volts, 150; triode grid volts, -3.

■ In circuits where the cathode is not connected directly to the heater, the potential difference between heater and cathode should be kept as low as possible.

● With shield-can connected to cathode.

\* Applied through 20000-ohm dropping resistor.

July 1, 1941

RCA RADOTRON DIVISION  
 RCA MANUFACTURING COMPANY, INC.

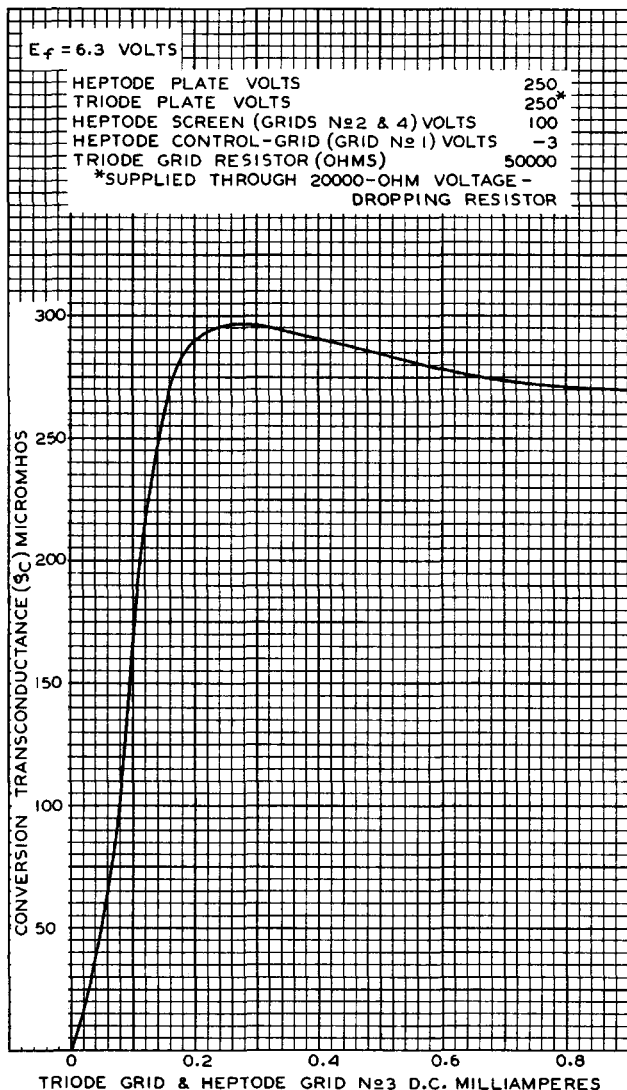
TENTATIVE DATA

6J8-G



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## OPERATION CHARACTERISTIC



MAY 13, 1941

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92C-6285