



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*	0.01	max. $\mu\mu f$
Heptode Grid #1 to Triode Plate*	0.015	max. $\mu\mu f$
Heptode Grid #1 to Triode Grid &		
Heptode Grid #30	0.13	$\mu\mu f$
Triode Grid to Triode Plate	2.2	$\mu\mu f$
Heptode Grid #1 to All Other Electrodes (R-F Input)	4.4	$\mu\mu f$
Triode Plate to All Other Electrodes (Osc. Output)	5.5	$\mu\mu f$
Triode Grid & Heptode Grid #3 to All Other Electrodes (Osc. Input)	11.7	$\mu\mu f$
Heptode Plate to All Other Electrodes (Mixer Output)	8.8	$\mu\mu f$
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		
Base		
Pin 1 - No Connection		Skirted Miniature
Pin 2 - Heater		Small Shell Octal 8-Pin
Pin 3 - Heptode Plate		Pin 5 - Triode Grid &
Pin 4 - Heptode Grids #2 & #4		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
<i>Typical Operation and Characteristics:</i>			
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	μhos
Heptode Control-Grid Bias for Conversion Transcond. of 2 μhos	-	-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 μhos 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.

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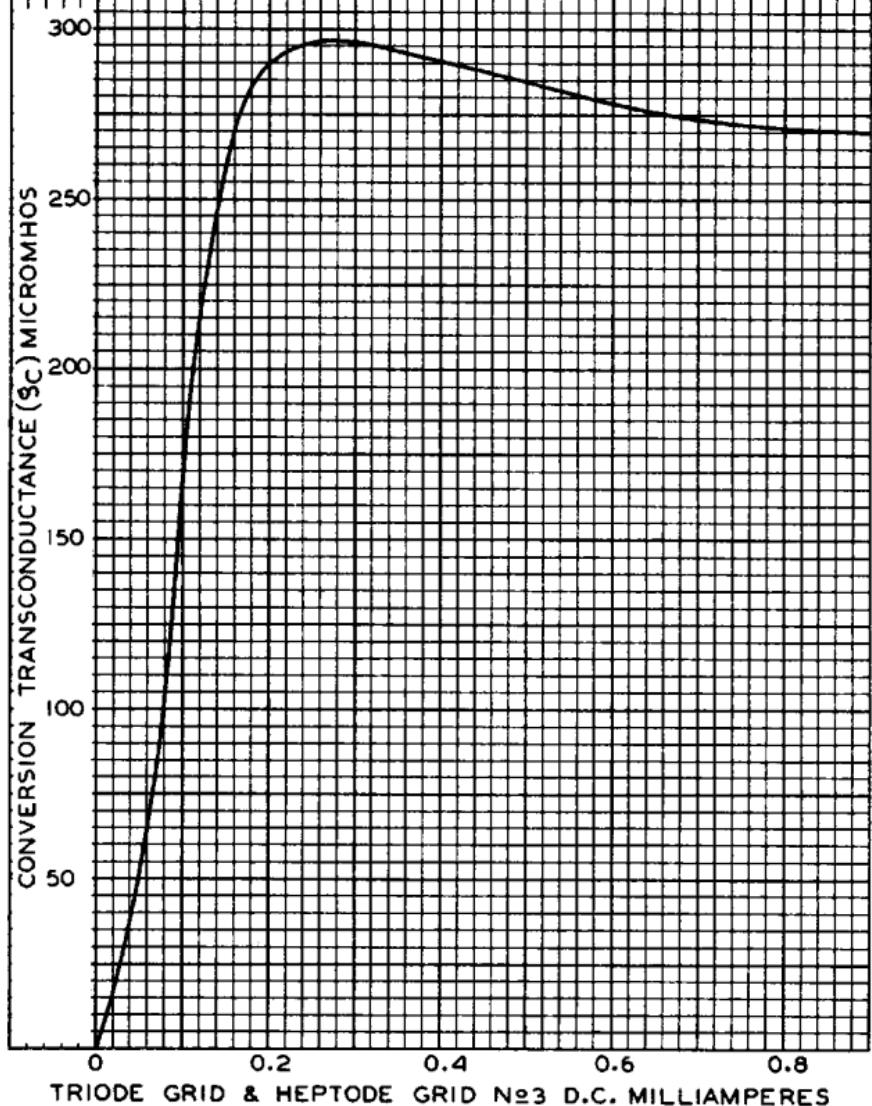
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OPERATION CHARACTERISTIC

 $E_f = 6.3$ VOLTS

HEPTODE PLATE VOLTS	250
TRIODE PLATE VOLTS	250*
HEPTODE SCREEN (GRIDS N ^o 2 & 4) VOLTS	100
HEPTODE CONTROL-GRID (GRID N ^o 1) VOLTS	-3
TRIODE GRID RESISTOR (OHMS)	50000

*SUPPLIED THROUGH 20000-OHM VOLTAGE-DROPPING RESISTOR



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RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

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