



6D8-G

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PENTAGRID CONVERTER

Heater ■ Coated Unipotential Cathode
 Voltage 6.3 a-c or d-c volts
 Current 0.15 amp.

Direct Interelectrode Capacitances: *

Grid #4 to Plate	0.20 μf
Grid #4 to Grid #2	0.20 μf
Grid #4 to Grid #1	0.16 μf
Grid #1 to Grid #2	1.1 μf
Grid #4 to All Other Electrodes (R-F Input)	8 μf
Grid #2 to All Other Electrodes Except Grid #1 (Osc. Output)	4.6 μf
Grid #1 to All Other Electrodes Except Grid #2 (Osc. Input)	5.5 μf
Plate to All Other Electrodes (Mixer Output)	11 μf

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

Maximum Diameter 1-9/16"

Bulb ST-12

Cap Skirted Miniature

Base Small Shell Octal 8-Pin

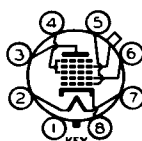
Pin 1 - No Connection

Pin 2 - Heater

Pin 3 - Plate

Pin 4 - Grids #3 & #5

Pin 5 - Grid #1



Pin 6 - Grid #2

Pin 7 - Heater

Pin 8 - Cathode

Cap - Grid #4

Mounting Position BOTTOM VIEW (G-8A) Any

CONVERTER SERVICE

Plate Voltage	300 max. volts
Screen (Grids #3 & #5) Voltage	100 max. volts
Screen Supply Voltage	300 max. volts
Anode-Grid (Grid #2) Voltage	200 max. volts
Anode-Grid Supply Voltage**	300 max. volts
Control-Grid (Grid #4) Voltage	0 min. volts
Plate Dissipation	1.0 max. watt
Screen Dissipation	0.3 max. watt
Anode-Grid Dissipation	0.75 max. watt
Total Cathode Current	13 max. ma.

Typical Operation:

Plate Voltage	135	250	volts
Screen Voltage	67.5	100	volts
Anode-Grid Supply Voltage	135	250**	volts
Control-Grid Voltage	-3	-3	volts
Osc.-Grid (Grid #1) Resistor	50000	50000	ohms
Plate Resistance (approx.)	0.6	0.4	ohms
Conversion Transconductance	325	550	μmhos
Conversion Transcond. (approx.)	5●	6●●	μmhos
Plate Current	1.5	3.5	ma.
Screen Current	1.7	2.6	ma.
Anode-Grid Current	3	4.3	ma.
Oscillator-Grid Current	0.2	0.4	ma.
Total Cathode Current	6.4	10.8	ma.

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

** Anode-grid supply voltages in excess of 200 volts require use of 20000-ohm voltage-dropping resistor by-passed by 0.1 μf condenser.

● With -25 volts on Grid #4. ●● With -35 volts on Grid #4.

For Typical Circuit and Coil Design Details, refer to Type 2A7..

FEB. 2, 1940

RCA RADOTRON DIVISION
 RCA MANUFACTURING COMPANY, INC.

DATA

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OPERATION CHARACTERISTICS
WITH 50000-OHM OSCILLATOR-GRID LEAK