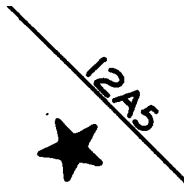




12A5



### POWER AMPLIFIER PENTODE

Heater	Cathode Unipotential Cathode		
Heater Arrangement	<u>Series</u> *	<u>Parallel</u> **	
Voltage	12.6	6.3	a-c or d-c volts
Current	0.3	0.6	amp.
Maximum Overall Length			4-3/16"
Maximum Seated Height			3-9/16"
Maximum Diameter			1-9/16"
Bulb			ST-12
Base			Small 7-Pin
Pin 1-Heater			Pin 5-Cathode
Pin 2-Plate			Pin 6-Heater Midtap
Pin 3-Screen			Pin 7-Heater
Pin 4-Grid			
Mounting Position			BOTTOM VIEW (7F)
<u>AMPLIFIER</u>			
Plate Voltage			180 max. volts
Screen Voltage			180 max. volts
Plate Dissipation			8.25 max. watts
Screen Dissipation			2.5 max. watts
<i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i>			
Plate Voltage	100	180	volts
Screen Voltage	100	180	volts
Grid Voltage <sup>o</sup>	-15	-25	volts
Peak A-F Grid Volt.	15	25	volts
Zero-Sig. Plate Cur.	17	45	ma.
Max.-Sig. Plate Cur.	19	48	ma.
Zero-Sig. Screen Cur.	3	8	ma.
Max.-Sig. Screen Cur.	6.5	14	ma.
Plate Resistance	50000	35000 approx.	ohms
Transconductance	1700	2400	μmhos
Load Resistance	4500	3300	ohms
Total Harm. Dist.	12	11	%
Second Harm. Dist.	8.5	6.5	%
Third Harm. Dist.	8	8	%
Max.-Sig. Power Output	0.8	3.4	watts
<p>■ 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.</p> <p>* Heater voltage applied across the two sections in series between pins #1 and #7.</p> <p>** Heater voltage applied across the two sections in parallel between pin #6 and pins #1 and #7 connected together.</p> <p><sup>o</sup> The type of coupling used should not introduce too much resistance in the grid circuit. Transformer- or impedance-coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not to exceed 0.5 megohm.</p>			

July 1, 1941

RCA RADIOTRON DIVISION  
RCA MANUFACTURING COMPANY, INC.

TENTATIVE DATA