12A5

POWER AMPLIFIER PENTODE

Heater ■	Cathode Unipotential Cathode		
Heater Arrangement	*Series**	*Parallel***	
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)		Any

AMPLIFIER

Plate Voltage		180 max.	volts
Screen Voltage		180 max.	volts
Plate Dissipation		8.25 max.	watts
Screen Dissipation		2.5 max.	watts
Typical Operation and Characteristics - Class A_1 Amplifier:			
Plate Voltage	100	180	volts
Screen Voltage	100	180	volts
Grid Voltage°	-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

■ 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.

* Heater voltage applied across the two sections in series between pins #1 and #7.

** Heater voltage applied across the two sections in parallel between pin #6 and pins #1 and #7 connected together.

° 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.