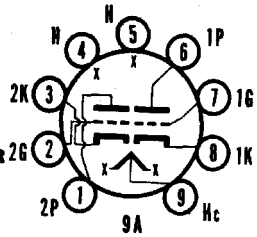
SYLVANIA TYPE 12DW7

AF AMPLIFIER AND PHASE INVERTER



MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-2
Basing	9A
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage Series/Parallel	12.6/6.3 Volts
Heater Current Series/Parallel	150/300 Ma
Heater-Cathode Voltage (Design Maximum Values)	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
D C	100 Volts Max.
Total D C and Peak	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES

	Section No. 1[1]		Section No. 2[1]	
	Shielded[2]	Unshielded	Shielded[2]	Unshielded
Grid to Plate	1.7	1.7	1.5	1.5 μμf
Input: g to (h+k)	1.8	1.6	1.8	1.7 μμf
Output: p to (h+k)	2.0	0.44	2.4	0.4 μμf

RATINGS (Design Maximum System)

	Section No. 1	Section No. 2
Plate Voltage	330	330 Volts Max.
Plate Dissipation	1.2	3.3 Watts Max.
Cathode Current	...	22 Ma Max.
Positive D C Grid Voltage	0	... Volts Max.
Negative D C Grid Voltage	55	... Volts Max.
Grid Circuit Resistance		
Fixed Bias		0.25 Megohm Max.
Self Bias		1.0 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier	Section No. 1		Section No. 2	
Plate Voltage	100	250	100	250 Volts
Grid Voltage	−1	−2	0	−8.5 Volts
Plate Current	0.5	1.2	11.8	10.5 Ma
Transconductance	1250	1600	3100	2200 μmhos
Amplification Factor	100	100	20	17
Plate Resistance	80,000	62,500	6500	7700 Ohms
Ec1 for Ib = 10 μamps				−24 Volts

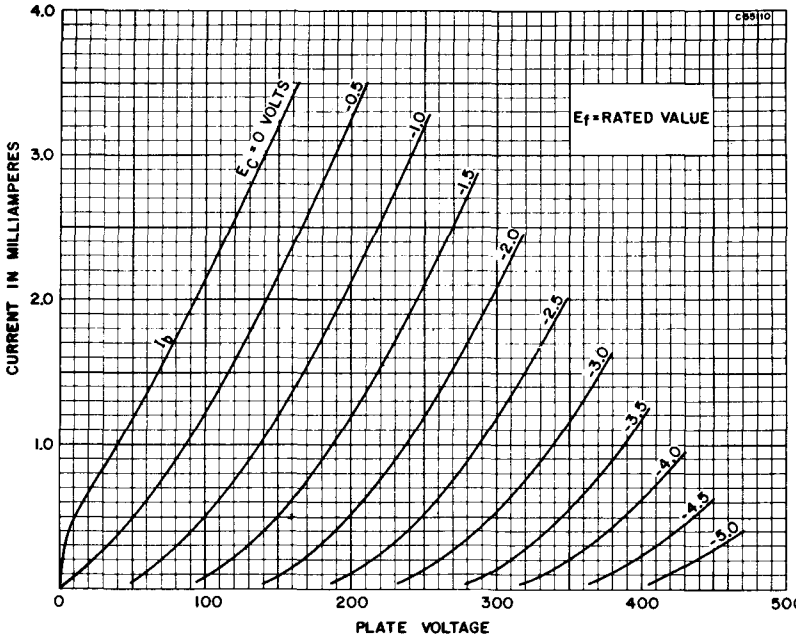
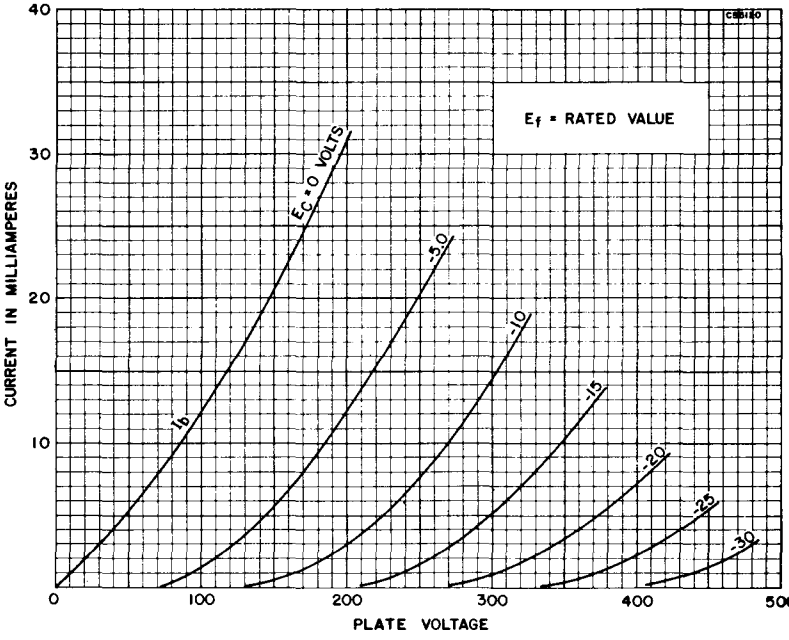
NOTES:

1. Section No. 1 connects to Pins 6, 7 and 8.
   Section No. 2 connects to Pins 1, 2 and 3.
2. External shield No. 315 connected to cathode of section under test.

APPLICATION

The Sylvania Type 12DW7 contains two dissimilar triodes. The high mu triode is similar to Type 12AX7 and the medium mu triode is similar to Type 12AU7. Type 12DW7 is especially suitable for applications requiring a high gain voltage amplifier and a cathodyne type phase-inverter.

AVERAGE PLATE CHARACTERISTICS
(Section No. 1)



AVERAGE PLATE CHARACTERISTICS
(Section No.2)