

HYGRADE SYLVANIA CORPORATION
TECHNICAL DATA
SYLVANIA TYPE 14W7

Amplifier Pentode

Physical Specifications

Coated Unipotential Cathode

Base

Bulb

Maximum Diameter

Maximum Overall Length

Maximum Seated Height

Pin Connections:

Pin 1 - Heater

Pin 2 - Plate

Pin 3 - Grids #2 & 3

Pin 4 - Cathode

Pin 5 - Internal Shield & Grid #4

Pin 6 - Grid #1

Pin 7 - Cathode

Pin 8 - Heater

Lock-In 8-pin

T-9

1 3/16"

2 25/32"

2 1/4"

RMA Basing 8BJ-L-5

Mounting Position

Any

Direct Interelectrode Capacitances *

Grid to Plate

Input G1 to (F/K/G2&G3/G4)

Output P to (F/K/G2&G3/G4)

.0025 max uuf

9.5 uuf

7.0 uuf

* With RMA tube shield MS-308 connected to cathode.

Ratings

Heater Voltage (ac or dc) (Nominal)

Heater Current (Nominal)

Maximum Plate Voltage

Maximum Screen Voltage

Maximum Plate and Screen Dissipation (Total)

Maximum Screen Dissipation

14.0 volts

0.240 ampere

300 volts

150 volts

4.0 watts

.8 watt

Typical Operating Conditions and Characteristics:

	<u>Condition I **</u>	<u>Condition II **</u>
Heater Voltage	12.6	12.6 volts
Heater Current	0.225	0.225 ampere
Plate Voltage	300	300 volts
Screen Supply Voltage ***	150	300 volts
Screen Series Resistor	---	40,000 ohm
Suppressor Voltage	0	0
Cathode Bias Resistor	160 min	160 min ohms
Plate Resistance	.3	.3 megohm
Mutual Conductance	5800	5800 umhos
Plate Current	10.0	10.0 ma.
Screen Current	3.9	3.9 ma.
Grid Voltage for Cathode Current Cut-Off	-6	-14 volts

- ** Conditions I and II represent operation with fixed screen supply and with series screen resistor respectively. Condition II gives an extended cut-off characteristic and should be used when gain is controlled by varying the bias.
- *** When a screen supply voltage in excess of 150 volts is used a series screen resistor must be used to limit the voltage at the screen to 150 volts when the plate current is at its rated value of 10.0 milliamperes.

Note:

The d-c resistance of the grid circuit should not exceed 0.25 megohm when operated with fixed screen voltage source (Condition I). When a series screen resistor is used and full cathode bias, the d-c resistance in the grid circuit may be as high as 0.5 megohm. (Condition II).

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