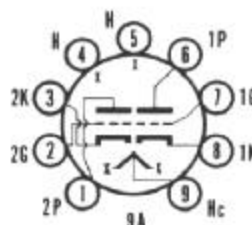




SYLVANIA TYPE 7025



MECHANICAL DATA

Bulb	T-6 1/2
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) ¹	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts
Heater Positive with Respect to Cathode	
D C	100 Volts
Total D C and Peak	200 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Section 1 ²		Section 2 ²	
	Shielded ³	Unshielded	Shielded ²	Unshielded
Grid to Plate	1.7	1.7	1.7	1.7 $\mu\mu\text{f}$
Input: (g to h+k)	1.8	1.6	1.8	1.6 $\mu\mu\text{f}$
Output: (p to h+k)	1.9	0.46	1.9	0.34 $\mu\mu\text{f}$

MAXIMUM RATINGS (Design Maximum Values)¹ Each Section

Plate Voltage	330 Volts
Plate Dissipation	1.2 Watts
Positive D C Grid Voltage	0 Volts
Negative D C Grid Voltage	55 Volts

CHARACTERISTICS AND TYPICAL OPERATION

Class A¹ Amplifier (Each Section)

Plate Voltage	100	250 Volts
Grid Voltage	-1	-2 Volts
Plate Current	0.5	1.2 Ma
Plate Resistance	80,000	62,500 Ohms
Transconductance	1250	1600 μmhos
Amplification Factor	100	100

EQUIVALENT NOISE AND HUM VOLTAGE

(Referenced to Grid, Each Section)

Average Value ⁴	1.8 $\mu\text{Volts RMS}$
Maximum Value ⁴	7 $\mu\text{Volts RMS}$

NOTES:

- Design-maximum ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.
The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics.
The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.
- Section No. 1 connects to Pins 6, 7 and 8.
Section No. 2 connects to Pins 1, 2 and 3.
- External shield No. 315 connected to cathode of section under test.
- Measured under the following conditions: $E_f = 6.3 \text{ Vac}$, parallel connection; center-tap of heater transformer grounded; $E_g = 250 \text{ Vdc}$; $R_1 = 0.1 \text{ Megohm}$; $R_k = 2700 \text{ Ohms}$; $C_k = 100 \mu\text{f}$; $R_g = 0$; $F = 25 \text{ to } 10,000 \text{ cps}$.
- Measured under same conditions as "Average Value" except that R_k is un-bypassed and $R_g = 50,000 \text{ Ohms}$.

APPLICATION

The Sylvania Type 7025 is a miniature high-mu twin triode having separate cathodes. It is designed for service as an audio voltage amplifier or phase inverter. The center tapped heater permits operation on 12.6 or 6.3 volts. The Type 7025 is identical to the 12A X7 except for improved noise and hum characteristics.