



MECHANICAL DATA

Bulb	T-9
Base	E12-70, 12-Pin
Outline	9-56
Basing	12BY
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

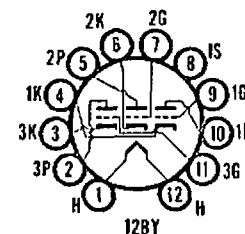
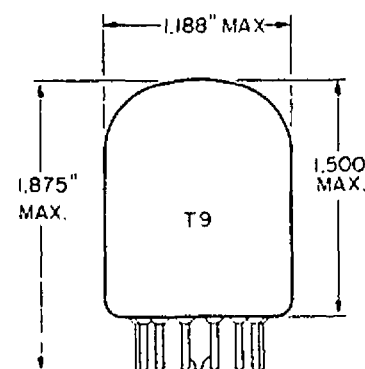
Heater Operation	Series	Parallel
Heater Voltage	6.3 ¹	6.3 ¹ Volts
Heater Current	600 ¹	600 Ma
Heater Warm-up Time ²	11	- Seconds

Ratings (Design Maximum Values)

	Min-Max	Min-Max
Heater Voltage ³	- -	5.7-6.9 Volts
Heater Current ³	560-640	- - Ma
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak	200	200 Volts
Heater Positive with Respect to Cathode		
DC	100	100 Volts
Total DC and Peak	200	200 Volts

QUICK REFERENCE DATA

The Sylvania Type 6BK11 is a compactron containing two 100 mu triodes and one 70 mu triode in a T-9 envelope. Features of the tube include separate pin connections for all three cathodes, grids and plates; an internal shield between Sections 1 and 3; a button base, and a compact glass envelope.


SYLVANIA ELECTRIC
PRODUCTS INC.

Electronic Components Group
ELECTRONIC TUBE DIVISION
EMPORIUM, PA.

A Technical Publication

June 3, 1964

Page 1 of 2

SYLVANIA

6BK11

Page 2

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section No. 1	Section No. 2	Section No. 3
Grid to Plate	1.3	1.3	1.3 pf
Input: g to (h+k+I.S.)	1.9	1.8	1.8 pf
Output: p to (h+k+I.S.)	1.8	0.7	1.8 pf

RATINGS (Design Maximum Values)

Sections 1, 2, and 3

Plate Voltage	330 Volts Max.
Plate Dissipation	0.4 Watts Max.
Positive Grid Voltage	0 Volt Max.
Negative Grid Voltage	50 Volts Max.

TYPICAL OPERATION

Class A1 Amplifier

	Section 1	Sections 2 and 3
Plate Voltage	250	250 Volts
Grid Voltage	-2.5	-2.0 Volts
Plate Current	1.6	1.2 Ma
Plate Resistance (Approx.)	45,000	62,500 Ohms
Transconductance	1550	1600 umhos
Amplification Factor	70	100

NOTES:

1. For series/parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current/voltage.
2. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
3. Heater voltage supply variations shall be restricted to maintain heater voltage/current within the specified values.