

MECHANICAL DATA

Bulb	T-9
Base	Octal
Outline	See Drawing
Basing	See Drawing
Output Cathodes	No. 0, 5, 8, and 9
Zero Position	No. 0 Cathode Aligned with Pin No. 6 $\pm 10^\circ$
Mounting Position	Any

ELECTRICAL DATA

INTERELECTRODE CAPACITANCES (Approx.)

Any Cathode to All Other Elements	4.2 pf
Guide No. 2 to All Other Elements	10 pf
Guide No. 1 to All Other Elements	11 pf

RATINGS (Absolute Values)

	Min.	Max.
Anode Supply Voltage ¹	400	800 Volts
Voltage Between Electrodes (Other than Anode)	—	140 Volts
Transfer Voltage	35	140 Volts
Anode Current	0.6	0.8 Ma
Input Frequency	0	100 Kpps
Ambient Temperature	-55	+60 °C

TYPICAL OPERATING CHARACTERISTICS

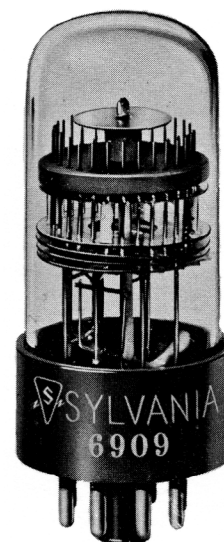
Anode Supply Voltage ¹	400 Volts	
Nominal Tube Drop	235 Volts	
Guide Bias	+45 Volts	Min.
Square Double Pulse Drive Amplitude (Each Pulse) ²	-85 Volts	Min.
Square Double Pulse Width (Each Pulse) ²	4 μ Sec.	Min.
Forced Reset Pulse Amplitude	-120 Volts	Min.
Forced Reset Pulse Width	4 μ Sec.	Min.
Cathode Load Resistor ³	50 K-Ohms	Max.

NOTES:

1. A value for the anode resistor can be computed by subtracting the nominal tube drop from the supply voltage and dividing the remainder by the desired operating current.
2. Two separate pulses, back to back or with slight overlap, must be maintained.
3. The peak pulse output voltage can be determined by the IR drop across the chosen cathode resistor.
4. A counter tube brochure is available on request from Sylvania Electric Products Inc., 1100 Main Street, Buffalo 9, New York.

QUICK REFERENCE DATA

The Type 6909 is a cold cathode, bidirectional decade counter tube with top viewed readout. It is designed to operate at inputs up to 100,000 pulses per second. Cathodes No. 0, 5, 8, and 9 are brought out to individual base pins. Applications include computing, scaling, counting, frequency dividing, coding, modulating, matrixing, indexing, multiplexing, addition and subtraction. (See Note 4.)



SYLVANIA ELECTRONIC TUBES

A Division of
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RECEIVING TUBE OPERATIONS

EMPORIUM, PA.

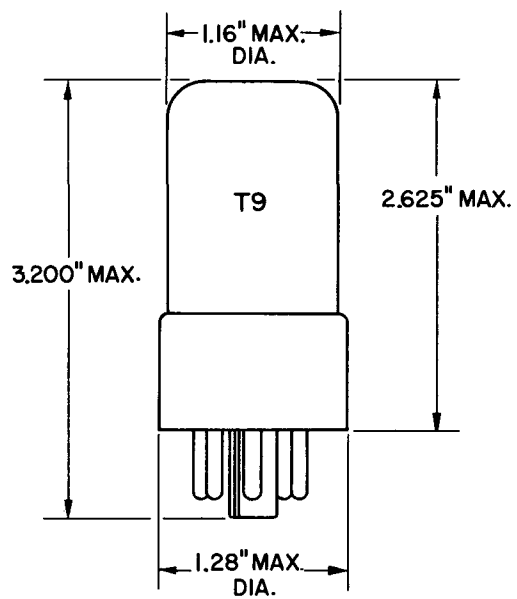
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PAGE 1 OF 2

File Under
SPECIAL PURPOSE
ELECTRONIC TUBES

OUTLINE



BASE CONNECTIONS

