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 ± 10°
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	350	800 Volts
Voltage Between Electrodes (Other than Anode)	—	140 Volts
Transfer Voltage	35	140 Volts
Anode Current	0.3	0.6 Ma
Input Frequency	0	4 Kpps
Ambient Temperature	−55	+60 °C

TYPICAL OPERATING CHARACTERISTICS

Anode Supply Voltage[1]	350 Volts	
Nominal Tube Drop	187 Volts	
Guide Bias	+35 Volts	Min.
Square Double Pulse Drive Amplitude (Each Pulse)[2]	−75 Volts	Min.
Square Double Pulse Width (Each Pulse)[2]	60 μSec.	Min.
Forced Reset Pulse Amplitude	−120 Volts	Min.
Forced Reset Pulse Width	50 μSec.	Min.
Cathode Load Resistor[3]	150 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 6802 is a cold cathode, bidirectional decade counter tube with top viewed readout. It is designed to operate at inputs up to 4000 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.)

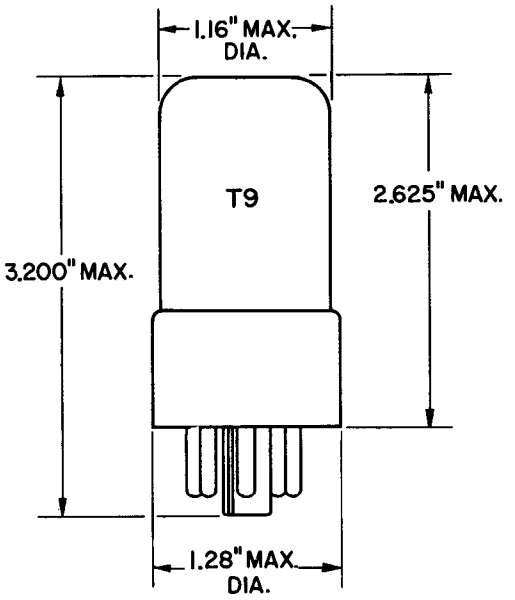
SYLVANIA
ELECTRONIC TUBES
A Division of
Sylvania Electric Products Inc.
RECEIVING TUBE
OPERATIONS
EMPORIUM, PA.

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

DECEMBER, 1963

File Under
SPECIAL PURPOSE
ELECTRONIC TUBES

OUTLINE



BASE CONNECTIONS