ADVANCE DATA

MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-2
Basing	9AE
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts	
Heater Current	400 Ma	
Heater-Cathode Voltage (Design Maximum Values)[3]		
Heater Negative with Respect to Cathode		
Total DC and Peak	200 Volts	Max.
Heater Positive with Respect to Cathode		
DC	100 Volts	Max.
Total DC and Peak	200 Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES

	Shielded[1]	Unshielded	
Pentode Section			
Grid No. 1 to Plate	.007	.015 μμf	Max.
Input: g1 to (h+k+g2+g3+I.S.)	5.0	5.0 μμf	
Output: p to (h+k+g2+g3+I.S.)	3.5	2.6 μμf	
Cathode to Heater	3.0[2]	3.0 μμf	
Triode Section			
Grid to Plate	1.8	1.8 μμf	
Input: g to (h+Pk+Tk+g3+I.S.)	2.8	2.8 μμf	
Output: p to (h+Pk+Tk+g3+I.S.)	2.0	1.5 μμf	
Cathode to Heater	3.0[2]	3.0 μμf	
Coupling			
Pentode Grid No.1 to Triode Plate	0.2	0.2 μμf	Max.
Pentode Plate to Triode Plate	.02	0.1 μμf	Max.

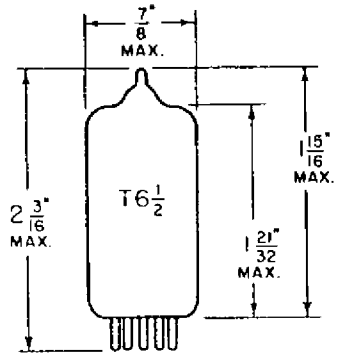
APPLICATION

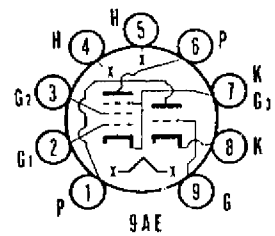
Control grid to cathode spacing on this tube type is of such low order of magnitude as to preclude the use of voltage between these elements of more than 100 volts dc or peak ac in commercial tube checkers and shorts indicating devices, particularly where mechanical excitation of the tube is employed.

from JEDEC release #3687, April 16, 1962

QUICK REFERENCE DATA

The Sylvania Type 6KD8 has a medium mu triode and sharp cutoff pentode contained in one envelope. It is intended for use as a combined VHF oscillator and mixer.





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

March 29, 1962

RATINGS (Design Maximum System)

	Triode Section	Pentode Section		
Plate Voltage	330	330	Volts	Max.
Grid No. 2 Supply Voltage		330	Volts	Max.
Grid No. 2 Voltage	See Rating Chart			
Positive DC Grid No. 1 Voltage	0	0	Volts	Max.
Plate Dissipation	2.5	3.0	Watts	Max.
Grid No. 2 Dissipation		0.55	Watt	Max.
Grid No. 1 Circuit Resistance				
Fixed Bias		0.5	Megohm	Max.
Self Bias		1.0	Megohm	Max.

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section	
Plate Voltage	125	125	Volts
Grid No. 2 Voltage		110	Volts
Grid No. 1 Voltage	-1.0	-1.0	Volts
Plate Current	13.5	9.5	Ma
Grid No. 2 Current		3.5	Ma
Transconductance	7500	5000	μmhos
Amplification Factor	40		
Plate Resistance (approx.)		0.2	Megohm
Ec1 for Ib = 20 μa (approx.)	-9	-8	Volts
Gm with Ec1 = 0v, Eb = 100v and Ec2 = 70v		5500	μmhos

NOTES:

1. External shield No. 315 connected to pin number 4.
2. External shield No. 315 connected to pin number 6.
3. Heater-Cathode Voltage ratings apply to triode and pentode sections.