



engineering data service

SYLVANIA

6KD8

ADVANCE DATA

MECHANICAL DATA

Bulb	T-6 $\frac{1}{2}$
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

Pentode Section	Shielded ¹	Unshielded	
Grid No. 1 to Plate	.007	.015 μ f	Max.
Input: g ₁ to (h+k+g ₂ +g ₃ +I.S.)	5.0	5.0 μ f	
Output: p to (h+k+g ₂ +g ₃ +I.S.)	3.5	2.6 μ f	
Cathode to Heater	3.0 ²	3.0 μ f	

Triode Section

Grid to Plate	1.8	1.8 μ f
Input: g to (h+Pk+Tk+g ₃ +I.S.)	2.8	2.8 μ f
Output: p to (h+Pk+Tk+g ₃ +I.S.)	2.0	1.5 μ f
Cathode to Heater	3.0 ²	3.0 μ f

Coupling

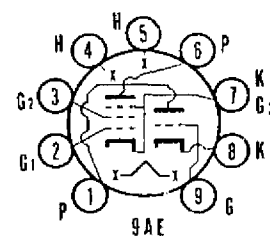
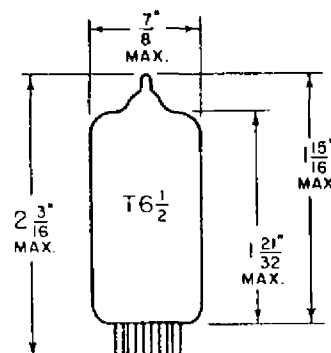
Pentode Grid No.1 to Triode Plate	0.2	0.2 μ f	Max.
Pentode Plate to Triode Plate	.02	0.1 μ f	Max.

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.

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

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	μ mhos	
Amplification Factor	40			
Plate Resistance (approx.)		0.2	Megohm	
E _{c1} for I _b = 20 μ a (approx.)	-9	-8	Volts	
G _m with E _{c1} = 0v, E _b = 100v and E _{c2} = 70v		5500	μ mhos	

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.