

VERTICAL DEFLECTION OSCILLATOR (T) and AMPLIFIER (P)

6KY8A

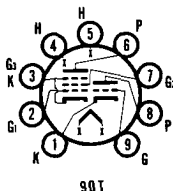
15KY8A

High Mu Triode and Beam Power Pentode

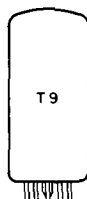
Construction Novar T-9
Base Button 9 Pin, E9-89
(Exhaust Tip on Base)

Basing 9QT
Outline 9-107
Maximum Diameter 1.188 In.
Maximum Seated Height 2.000 In.
Maximum Overall Height 2.380 In.

The 6KY8A and 15KY8A are identical to the 6KY8 and 15KY8 except for Base with exhaust tip on bottom and shorter bulb.



9QT



Color Television Type VHF OSCILLATOR and MIXER

6KZ8

5KZ8, 9KZ8

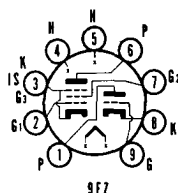
Medium Mu Triode and Sharp Cutoff Pentode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9FZ

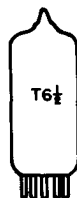
Outline 6-2
Maximum Diameter 0.875 In.
Maximum Seated Height 1.937 In.
Maximum Overall Height 2.187 In.

ELECTRICAL DATA HEATER OPERATION

Heater Voltage.....
Heater Current
Heater Warm-up Time
Maximum Heater-Cathode Voltage
Heater Negative with Respect to Cathode
Total DC and Peak.....
Heater Positive with Respect to Cathode
DC
Total DC and Peak



9FZ



	9KZ8	5KZ8
Heater Voltage	9.45	4.7
Heater Current	300	600
Heater Warm-up Time	11	11

6KZ8
6.3 Volts
450 Ma
11 Seconds

200 Volts
100 Volts
200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽¹⁾

Triode Section

Grid to Plate	1.6 Pf
Input: g to (Tk + Pk + g3 + h + IS)	3.2 Pf
Output: p to (Tk + Pk + g3 + h + IS)	1.8 Pf
Heater to Cathode	3.2 ⁽²⁾ Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.01 Pf
Input: g1 to (k + g3 + g2 + h + IS).....	5.5 Pf
Output: p to (k + g3 + g2 + h + IS).....	3.4 Pf
Heater to Cathode	3.2 ⁽²⁾ Pf

RATINGS (Design Maximum Rating System)

Converter Service

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	2.5	2.5 Watts
Screen Dissipation (Max.)	—	0.55 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.25	0.25 Megohm
Self Bias (Max.)	0.5	0.5 Megohm

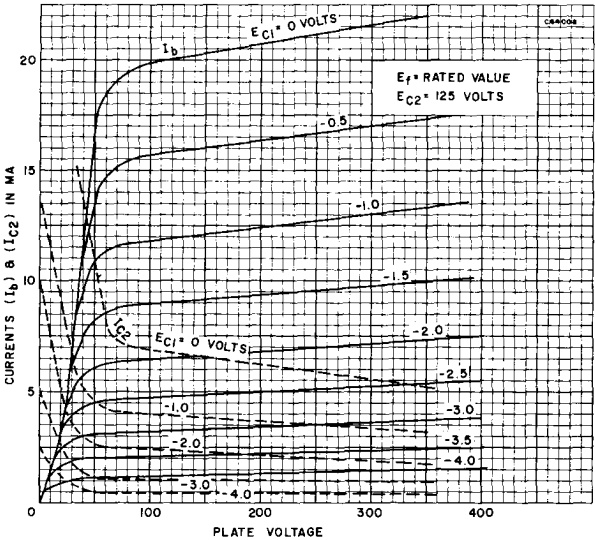
CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	-1	-1 Volt
Plate Current	13.5	12 Ma
Grid No. 2 Current	—	4.0 Ma
Transconductance	8500	7500 μ mhos
Amplification Factor	46	—
Plate Resistance (Approx.)	5400	200,000 Ohms
Ec1 for Ib = 10 μ a (Approx.)	-8	-8 Volts

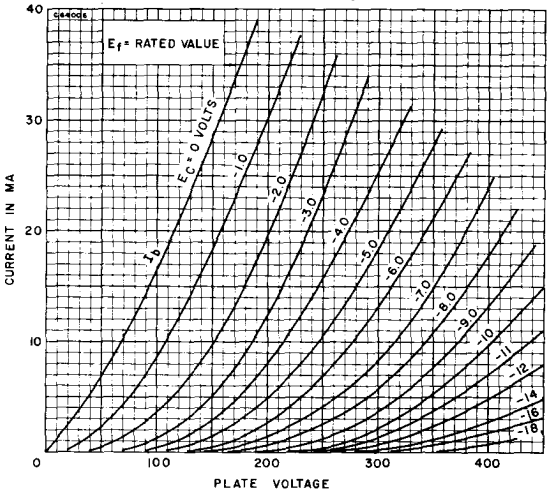
NOTES:

- (1) Shield No. 315 connected to cathode.
- (2) Shield No. 315 connected to ground.

AVERAGE PLATE CHARACTERISTICS
(Pentode Section)



AVERAGE PLATE CHARACTERISTICS
(Triode Section)

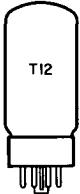
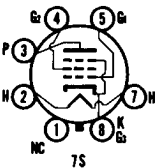


AUDIO POWER AMPLIFIER

6L6GC

Beam Power Pentode

Construction Octal T-12
Base 6 or 7 Pin, B6-122, B6-148
 B7-12, B7-111 or B7-119
Basing.....7S
Outline 12-15
Maximum Diameter 1.562 In.
Maximum Seated Height 3.688 In.
Maximum Overall Height 4.250 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current.....	900 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
DC.....	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate.....	0.6 Pf
Input.....	10 Pf
Output.....	6.5 Pf

RATINGS (Design Maximum Rating System)

Class AB1 Pentode Operation

	Triode Conn.	Pentode Conn.
Plate Voltage (Max.).....	450	270 Volts
Grid No. 2 Voltage (Max.).....	—	450 ⁽¹⁾ Volts
Plate Dissipation (Max.).....	30	30 Watts
Grid No. 2 Dissipation (Max.).....	—	5.0 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.).....	0.1	0.1 Megohm
Cathode Bias (Max.).....	0.5	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Pentode Operation (Class A1 Amp.)

	Single Tube			Push-Pull	
Plate Voltage.....	250	300	250	250	270 Volts
Grid No. 2 Voltage.....	250	200	250	250	270 Volts
Grid No. 1 Voltage.....	-14	-12.5	-18	-16	-17.5 Volts
Peak AF Grid Voltage.....	14	12.5	18	16	17.5 Volts
Zero Signal Plate Current.....	72	48	54	120	134 Ma
Maximum Signal Plate Current.....	79	55	66	140	155 Ma
Zero Signal Grid No. 2 Current.....	5.0	2.5	2.5	10	11 Ma
Maximum Signal Grid No. 2 Current.....	7.3	4.7	7.0	16	17 Ma
Transconductance.....	6K	5.3K	5.2K	—	— μ mhos
Plate Resistance (Approx.).....	22.5K	35K	33K	—	— Ohms
Load Resistance.....	2.5K	4.5K	4.2K	—	— Ohms
Load Resistance (PL to PL).....	—	—	—	5K	5K Ohms
Power Output.....	6.5	6.5	10.8	14.5	17.5 Watts
Total Harmonic Distortion.....	10	11	15	2	2 Percent

Pentode Operation

	Class AB2 Push-Pull		Class AB1 Push-Pull	
Plate Voltage.....	360	360	360	450 Volts
Grid No. 2 Voltage.....	225	270	270	400 Volts
Grid No. 1 Voltage.....	-18	-22.5	-22.5	-37 Volts
Peak AF Grid Voltage.....	26	36	22.5	35 Volts
Zero Signal Plate Current.....	78	88	88	116 Ma
Maximum Signal Plate Current.....	142	205	132	210 Ma
Zero Signal Grid No. 2 Current.....	3.5	5.0	5.0	5.6 Ma
Maximum Signal Grid No. 2 Current.....	11	16	15	22 Ma
Load Resistance (PL to PL).....	6000	3800	6600	5600 Ohms
Power Output.....	31	47	26.5	55 Watts
Total Harmonic Distortion.....	2	2	2	1.8 Percent