

DC Plate Current for Load Current of 1 Ma	45 μ a
Regulated DC Output Voltage at Zero Load Current	25,000 Volts
Regulated DC Output Voltage at Load Current of 1 Ma.....	24,500 Volts

NOTES:

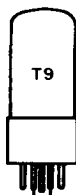
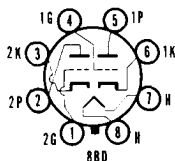
- (1) Peak value for duration of 20 seconds maximum during equipment warm-up.
 (2) With flyback transformer high-voltage supply.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated higher than 16,000 volts.

6EA7**15EA7****VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER****Double Dissimilar Triode**

Construction	T-9
Base	B8-6 or B8-251
Basing	.8BD
Outline	9-5
Maximum Diameter	1.281 In.
Maximum Seated Height	2.439 In.
Maximum Overall Height	3.000 In.

**ELECTRICAL DATA****HEATER OPERATION**

	15EA7	6EA7
Heater Voltage.....	14.8	6.3 Volts
Heater Current	450	1050 Ma
Heater Warm-up Time	11	— Seconds
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)

	Section No. 1⁽³⁾	Section No. 2
Grid to Plate	4.0	8 Pf
Input: g to (h + k)	2.2	6 Pf
Output: p to (h + k)	0.6	1.3 Pf

RATINGS (Design Maximum Rating System)**Vertical Deflection Oscillator and Amplifier⁽¹⁾**

	Section No. 1⁽³⁾ Oscillator	Section No. 2 Amplifier
DC Plate Voltage (Max.)	350	550 Volts
Peak Positive Pulse Plate Voltage (Abs. Max.).....	—	1500 Volts
Peak Negative Pulse Grid Voltage (Max.)	400	250 Volts
Plate Dissipation (Max.) ⁽²⁾	1.0	10 Watts
Average Cathode Current (Max.).....	22	50 Ma
Peak Cathode Current (Max.)	77	175 Ma
Grid Circuit Resistance		
Fixed Bias (Max.)	1.0	1.0 Megohm
Self Bias (Max.)	2.2	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	Section No. 1⁽³⁾	Section No. 2
Plate Voltage	250	175 Volts
Grid No. 1 Voltage	-3	-25 Volts
Plate Current	2.0	40 Ma
Transconductance	2200	6000 μ mhos
Amplification Factor	66	5.5
Plate Resistance (Approx.)	30,000	920 Ohms
Ec for Ib = 20 μ a (Approx.).....	-5.3	— Volts
Ec for Ib = 200 μ a (Approx.).....	—	-45 Volts

INSTANTANEOUS ZERO BIAS PLATE VALUES (Section No. 2)

Eb = 60 V, Ec = 0

Ib = 100 Ma

NOTES:

- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (2) In stages operating with grid-leak bias, an adequate bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (3) Section No. 1 connects to Pins 4, 5, and 6.

Color Television Type

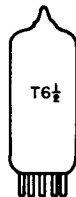
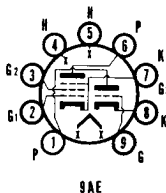
VHF OSCILLATOR and MIXER or GENERAL PURPOSE AMPLIFIER

6EA8/6GH8A

 5EA8, 5GH8, 5GH8A,
9EA8, 9GH8A, 19EA8

Medium Mu Triode and Sharp Cutoff Pentode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9AE
Outline 6-2
Maximum Diameter 0.875 In.
Maximum Seated Height 1.937 In.
Maximum Overall Height 2.187 In.



ELECTRICAL DATA HEATER OPERATION

	19EA8	9EA8 9GH8A	5EA8 5GH8 5GH8A	6EA8/6GH8A
Heater Voltage.....	18.9	9.5	4.7	6.3 Volts
Heater Current	150	300	600	450 Ma
Heater Warm-up Time	11	11	11	11 Seconds

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 (Shielded)

Triode Section

Grid to Plate	1.7 Pf
Input	3.2 Pf
Output	1.9 Pf
Heater to Cathode	3.0 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.01 Pf
Input	5.0 Pf
Output	3.4 Pf
Heater to Cathode	3.0 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section	Pentode Section Horiz. Defl. Osc. (1)
Plate Voltage (Max.)	330	330	350 Volts
Grid No. 2 Supply Voltage (Max.)	—	330	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)		
Positive Grid No. 1 Voltage (Max.)	—	0	0 Volt
Peak Negative Pulse Grid Voltage (Max.)	0	—	175 Volts
Average Cathode Current (Max.).....	—	—	20 Ma
Peak Cathode Current (Max.).....	—	—	300 Ma
Plate Dissipation (Max.)	2.5	3.1	2.5 Watts
Grid No. 2 Dissipation (Max.)	—	0.55	0.55 Watt
Maximum Grid No. 1 Circuit Resistance			
Fixed Bias	2.2	—	2.2 Megohms
Self Bias	2.2	—	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

	Triode Section	Pentode Section
Plate Voltage	150	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	—	-1.0 Volts
Cathode Bias Resistor	56	— Ohms
Plate Current	18	12 Ma
Grid No. 2 Current	—	4 Ma