

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

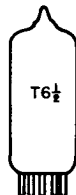
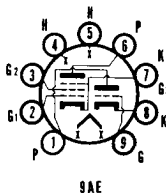
VHF OSCILLATOR and MIXER or GENERAL PURPOSE AMPLIFIER

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

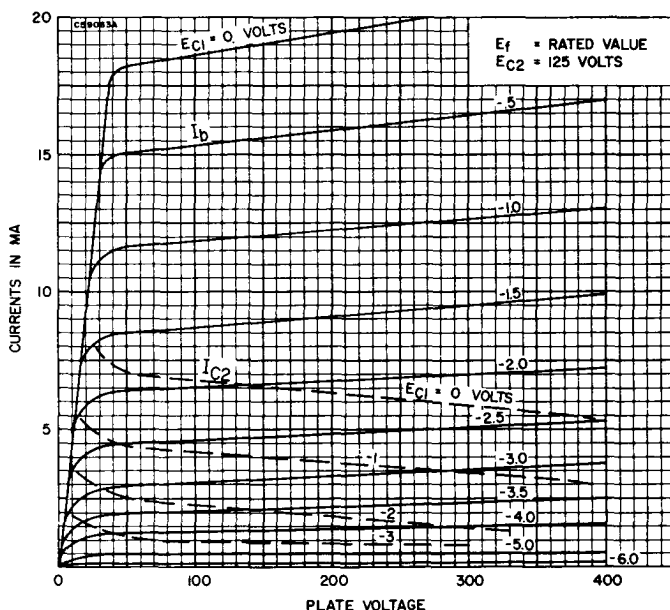
	Triode Section	Pentode Section
Plate Voltage	150	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	—	-1.0 Volts
Cathode Bias Resistor	56	— Ohms
Plate Current	18	12 Ma
Grid No. 2 Current	—	4 Ma

Transconductance	8500	6400 μ mhos
Amplification Factor	40	—
Plate Resistance (Approx.)	5000	200,000 Ohms
E_{c1} for $I_b = 10 \mu$ a (Approx.)	-12	-9 Volts

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AVERAGE PLATE CHARACTERISTICS (Pentode Section)



AVERAGE PLATE CHARACTERISTICS (Triode Section)

