

# 6AL9

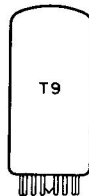
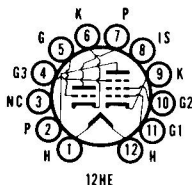
## 8AL9

Color Television Type

# GENERAL PURPOSE AMPLIFIER (T) VIDEO AMPLIFIER (P)

## High Mu Triode and Sharp Cutoff Pentode

Construction.....Compactron T-9  
 Base .....E12-70  
 Basing .....12HE  
 Outline .....9-59  
 Maximum Diameter .....1.188 In.  
 Maximum Seated Height .....2.250 In.  
 Maximum Overall Height .....2.625 In.



## ELECTRICAL DATA

### HEATER OPERATION

	6AL9	8AL9
Heater Voltage.....	6.3	8.6 Volts
Heater Current .....	820	600 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)

#### Triode Section

Grid to Plate .....	2.8 pf
Input: g to (h + Tk + Pk, g3, I.S.) .....	3.6 pf
Output: p to (h + Tk + Pk, g3, I.S.) .....	2.2 pf

#### Pentode Section

Grid No. 1 to Plate (Max.) .....	0.16 pf
Input: g1 to (h + Pk, g3, I.S. + g2) .....	17 pf
Output: p to (h + Pk, g3, I.S. + g2) .....	6.4 pf

### RATINGS (Design Maximum Values)

	Triode Section	Pentode Section
Plate Voltage .....	330	330 Volts
Grid No. 2 Supply Voltage (Max.) .....	—	200 Volts
Positive Grid No. 1 Voltage (Max.) .....	0	0 Volt
Grid No. 2 Dissipation (Max.) .....	—	1.5 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.) .....	0.5	0.1 Megohm
Cathode Bias (Max.) .....	1.0	0.25 Megohm

## CHARACTERISTICS AND TYPICAL OPERATION

	<b>Triode Section</b>	<b>Pentode Section</b>	
Plate Voltage .....	200	55	250 Volts
Grid No. 1 Voltage .....	—	0	— Volt
Grid No. 2 Voltage .....	—	125	150 Volts
Cathode Bias Resistor .....	270	—	56 Ohms
Plate Current .....	7.6	56	28 Ma
Grid No. 2 Current .....	—	21	5.6 Ma
Transconductance .....	6300	—	30,000 $\mu$ mhos
Amplification Factor .....	59	—	—
Plate Resistance (Approx.) .....	9200	—	40,000 Ohms
$E_{c1}$ for $I_b = 100 \mu a$ (Approx.) .....	-63	—	-5.4 Volts