

RATINGS (Design Maximum Rating System)

Damper Service

Peak Inverse Plate Voltage (Max.) ⁽¹⁾	4500 Volts
Plate Dissipation (Max.)	6.0 Watts
Steady State Peak Current (Max.)	750 Ma
DC Plate Current (Max.)	185 Ma
Bulb Temperature (Max.).....	220 °C

CHARACTERISTICS AND TYPICAL OPERATION

Tube Voltage Drop for Ib = 350 Ma	25 Volts
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NOTE:

- (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.

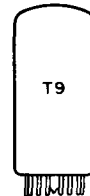
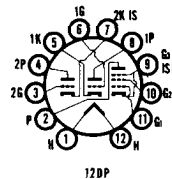
AGC KEYSER, SYNC SEPARATOR AND VIDEO AMPLIFIER

6AF11

10AF11, 12AF11, 15AF11

Hi Mu Triode, Medium Mu Triode and Sharp Cutoff Pentode

Construction.....	Compactron T-9
Base	Butt-on 12 Pin, E12-70
Basing	12DP
Outline	9-58
Maximum Diameter	1.188 In.
Maximum Seated Height	2.250 In.
Maximum Overall Height	2.625 In.



ELECTRICAL DATA

HEATER OPERATION

	15AF11 Series	12AF11 Series	10AF11 Series	6AF11 Parallel
Heater Voltage.....	14.7	12.6	9.8	6.3 Volts
Heater Current	450	450	600	1050 Ma
Heater Warm-up Time	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 (Unshielded)

Triode No. 1

Grid to Plate	1.9 Pf
Input: 1Tg1 to (1Tk + 2Tk + Pk + Pg3 + h + IS)	3.0 Pf
Output: 1Tp to (1Tk + 2Tk + Pk + Pg3 + h + IS)	2.2 Pf

Triode No. 2

Grid to Plate	3.6 Pf
Input: 2Tg1 to (2Tk + Pk + Pg3 + h + IS)	2.4 Pf
Output: 2Tp to (2Tk + Pk + Pg3 + h + IS)	3.8 Pf

Pentode

Grid to Plate	0.12 Pf
Input: Pg1 to (2Tk + Pk + Pg2 + Pg3 + h + IS)	10.0 Pf
Output: Pp to (2Tk + Pk + Pg2 + Pg3 + h + IS)	4.5 Pf

Coupling

Pentode Plate to Triode No. 2 Plate (Max.)	0.045 Pf
Triode No. 1 Plate to Triode No. 2 Plate (Max.)	0.06 Pf

RATINGS (Design Maximum Rating System)

Triode No. 1

Plate Voltage (Max.)	330 Volts
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	1.1 Watts
Grid Circuit Resistance	
Fixed Bias (Max.)	0.5 Megohm
Cathode Bias (Max.)	1.0 Megohm

Triode No. 2

Plate Voltage (Max.)	330 Volts
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	2.0 Watts

Grid Circuit Resistance		
Fixed Bias (Max.)	.....	0.5 Megohm
Cathode Bias (Max.)	.....	1.0 Megohm
Pentode		
Plate Voltage (Max.)	.....	330 Volts
Screen Supply Voltage (Max.)	.....	330 Volts
Screen Voltage	.....	See Rating Chart (Gen. Info. Sec.)
Positive DC Grid No. 1 Voltage	.....	0 Volt
Plate Dissipation	.....	5.0 Watts
Screen Dissipation	.....	1.25 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias	.....	0.25 Megohm
Cathode Bias	.....	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Triode No. 1**

Plate Voltage	.....	200 Volts
Grid Voltage	.....	-2.0 Volts
Amplification Factor	.....	68
Plate Resistance (Approx.)	.....	12,400 Ohms
Transconductance	.....	5500 μ mhos
Plate Current	.....	7.0 Ma
Grid Voltage (Approx.)	.....	
$I_b = 10 \mu a$	.....	-5.5 Volts

Triode No. 2

Plate Voltage	.....	200 Volts
Cathode-Bias Resistor	.....	220 Ohms
Amplification Factor	.....	41
Plate Resistance (Approx.)	.....	9400 Ohms
Transconductance	.....	4400 μ mhos
Plate Current	.....	9.2 Ma
Grid Voltage (Approx.)	.....	
$I_b = 10 \mu a$	.....	-6.5 Volts

Pentode Section

Plate Voltage	.....	50	200 Volts
Screen Voltage	.....	150	150 Volts
Grid No. 1 Voltage	.....	0	— Volts
Cathode-Bias Resistor	.....	—	100 Ohms
Plate Resistance (Approx.)	.....	—	68,000 Ohms
Transconductance	.....	—	11,000 μ mhos
Plate Current	.....	55	24 Ma
Screen Current	.....	18	4.8 Ma
Grid No. 1 Voltage (Approx.)	.....	—	
$I_b = 100 \mu a$	.....	—	-10 Volts

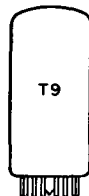
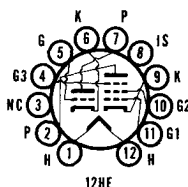
6AG9

Color Television Type

**AGC AMPLIFIER
AND VIDEO AMPLIFIER**

Triode and Frame Grid Pentode

Construction	.....	Compactron T-9
Base	.....	Button 12 Pin, 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**

Heater Voltage	.....	6.3 Volts
Heater Current	.....	820 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)**Triode**

Grid to Plate	.....	2.8 Pf
Input: Tg to (h + Tk + IS)	.....	3.6 Pf
Output: Tp to (h + Tk + IS)	.....	2.2 Pf