

Suppressor Voltage	-100 to +25 Volts
Screen Supply Voltage.....	300 Volts
Positive DC Grid Voltage.....	0 Volt
Plate Dissipation	1.7 Watts
Screen Dissipation	1.0 Watt
Grid No. 3 Dissipation	0.1 Watt
Grid No. 3 Circuit Resistance	0.68 Megohm
Grid No. 1 Circuit Resistance	
Fixed Bias	0.22 Megohm
Cathode Bias	0.47 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Section No. 1 (Power Amplifier)****Class A1 Amplifier**

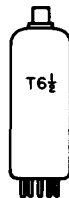
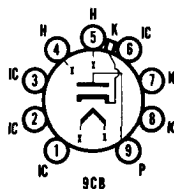
Plate Voltage	250 Volts
Screen Voltage	250 Volts
Grid No. 1 Voltage	-8.0 Volts
Peak AF Grid Voltage	8.0 Volts
Plate Resistance (Approx.)	100,000 Ohms
Transconductance	6500 μ mhos
Zero Signal Plate Current	35 Ma
Maximum Signal Plate Current	39 Ma
Zero Signal Screen Current	2.5 Ma
Maximum Signal Screen Current	7.0 Ma
Load Resistance	5000 Ohms
Total Harmonic Distortion (Approx.)	10 Percent
Maximum Signal Power Output.....	4.2 Watts

Section No. 2 (FM Detector)

Plate Voltage	150 Volts
Suppressor Voltage	0 Volt
Screen Voltage	100 Volts
Cathode Resistor	180 Ohms
Plate Resistance (Approx.)	110,000 Ohms
Transconductance (G1)	3400 μ mhos
Transconductance (G3)	600 μ mhos
Plate Current	2.8 Ma
Screen Current	3.4 Ma
Ec1 for Ib = 20 μ a	-4.5 Volts
Ec3 for Ib = 20 μ a	-7 Volts

6AF3**12AF3****DAMPER****Heater-Cathode Diode**

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Top Cap	C1-1
Basing	.9CB
Outline	.6-8
Maximum Diameter	0.875 In.
Maximum Seated Height	3.000 In.
Maximum Overall Height	3.281 In.

**ELECTRICAL DATA
HEATER OPERATION**

	12AF3 Series	6AF3 Parallel
Heater Voltage.....	12.6	6.3 Volts
Heater Current	600	1200 Ma
Heater Warm-up Time	11	— Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
DC		1000 Volts
Total DC and Peak		4500 Volts
Heater Positive with Respect to Cathode		
DC		100 Volts
Total DC and Peak		300 Volts
DIRECT INTERELECTRODE CAPACITANCES		
Heater to Cathode		2.8 Pf
Plate to Cathode and Heater		6.0 Pf
Cathode to Plate and Heater		9.0 Pf

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.

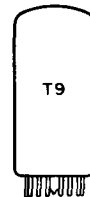
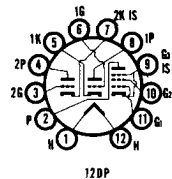
AGC KEYSER, SYNC SEPARATOR AND VIDEO AMPLIFIER

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