

Deflector No. 1 Current (Max.) Ed1 = 125 V, Ed2 = 25 V	0.04 Ma
Deflector No. 2 Current (Max.) Ed1 = 25 V, Ed2 = 125 V	0.04 Ma

NOTES:

- (1) Pin 5 should be connected directly to ground.
- (2) Deflector switching voltage is defined as the total voltage change from +75 Volts on either deflector with an equal and opposite change on the other deflector required to switch the plate current from one plate to the other.
- (3) The 6ME8 should be so located in the equipment that it is not subjected to stray magnetic fields.

6MF8

15MF8

Color Television Type

VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER

High Mu Triode and Beam Power Pentode

Construction.....	Compactron T-12
Base	Button 12 Pin, E12-74
Basing	12DZ
Outline	12-57
Maximum Diameter	1.562 In.
Maximum Seated Height	2.750 In.
Maximum Overall Height	3.125 In.

**ELECTRICAL DATA
HEATER OPERATION**

	15FM8	6MF8
Heater Voltage	14.7	6.3 Volts
Heater Current	600	1400 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	6.0 Pf
Input	6.5 Pf
Output	1.6 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.54 Pf
Input	9.5 Pf
Output	7.0 Pf

Coupling

Pentode Grid No. 1 to Triode Plate (Max.)	0.12 Pf
Pentode Plate to Triode Plate (Max.)	0.32 Pf

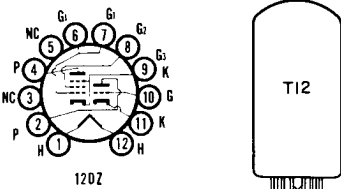
RATINGS (Design Maximum Rating System)

Vertical Deflection Oscillator and Amplifier⁽¹⁾

	Tri. Osc.	Pent. Amp.
Plate Voltage (Max.)	400	400 Volts
Grid No. 2 Voltage (Max.)	—	300 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2500 Volts
Peak Negative Grid No. 1 Voltage (Max.)	400	— Volts
Plate Dissipation (Max.) ⁽²⁾	2.5	12 Watts
Grid No. 2 Dissipation (Max.) ⁽²⁾	—	2.75 Watts
Average Cathode Current (Max.).....	30	75 Ma
Peak Cathode Current (Max.)	105	260 Ma
Peak Power Output (Max.)	2.5	— Watts
Grid Circuit Resistance		
Self Bias (Max.)	2.2	2.2 Megohms
Fixed Bias (Max.)	—	1.0 Megohm
Bulb Temperature (Max.)	—	200 °C

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	250	250 Volts
Grid No. 2 Voltage	—	250 Volts
Grid No. 1 Voltage	—4	—20 Volts
Plate Current	2.6	50 Ma
Grid No. 2 Current	—	3.5 Ma



Transconductance	4100	4100 μ mhos
Amplification Factor	58	—
Plate Resistance (Approx.)	14,000	5000 Ohms
Ec for Ib = 10 μ a	-6.6	— Volts
Ec for Ib = 100 μ a	—	-65 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 60 V; Ec2 = 250 V; and Ec = 0 V

Ib = 200 Ma, and Ic2 = 20 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.

HORIZONTAL DEFLECTION OSC. SYNC SEP. or AGC AMPLIFIER

6MG8

Medium Mu Triode and Sharp Cutoff Pentode

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

ELECTRICAL DATA**HEATER OPERATION**

Heater Voltage.....	6.3 Volts
Heater Current	450 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 (Shielded)**Triode Section**

Grid to Plate	1.5 Pf
Input: Tg1 to (Tk, H, Pk, Pg3 and IS)	2.9 Pf
Output: Tp to (Tk, H, Pk, Pg3 and IS)	1.6 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.025 Pf
Input: Pg1 to (Pk, H, Pg2, Pg3 and IS).....	5.5 Pf
Output: Pp to (Pk, H, Pg2, Pg3 and IS).....	3.8 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Plate Dissipation (Max.)	2.5	2.0 Watts
Grid No. 2 Supply Voltage (Max.)	—	300 Volts
Grid No. 2 Dissipation		
At Plate Dissipation More Than 1.2 Watts (Max.)	—	0.5 Watts
At Plate Dissipation Less Than 1.2 Watts (Max.)	—	0.75 Watts
Cathode Current (Max.)	14	14 Ma
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.5 Megohm
Cathode Bias (Max.)	0.5	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	150	170 Volts
Grid No. 2 Voltage	—	170 Volts
Grid No. 1 Voltage	—	-2.0 Volts
Cathode Bias Resistor	56	— Ohms
Plate Current	18.0	10 Ma
Grid No. 2 Current	—	2.8 Ma
Transconductance	8500	6200 μ mhos
Plate Resistance (Approx.)	5.0	400 K Ohms
Amplification Factor	40	47 (G2-G1)
Grid No. 1 Voltage (Ib = 10 μ a)	-12	— Volts

