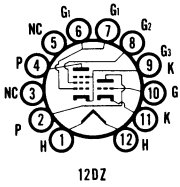
6MF8

15MF8

Color Television Type

VERTICAL DEFLECTION OSCILLATOR and AMPLIFIER

High Mu Triode and Beam Power Pentode



12DZ

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 μmhos
Amplification Factor	58	—
Plate Resistance (Approx.)	14,000	5000 Ohms
Ec for Ib = 10 μa	-6.6	— Volts
Ec for Ib = 100 μa	—	-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.