

Output: p to (h + Pk + g2 + g3 + IS)	3.0	2.0 Pf
Pentode Plate to Triode Plate (Max.)	0.03	0.15 Pf

RATINGS (Design Maximum Rating System)

	Tri. Sec. Vert. Defl. Osc. ⁽²⁾	Pent. Sec. Class A Amp.
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive Grid No. 1 Voltage (Max.)	—	0 Volt
Peak Negative Pulse Grid Voltage (Max.)	250	— Volts
Average Cathode Current (Max.)	20	— Ma
Peak Cathode Current (Max.)	70	— Ma
Plate Dissipation (Max.) ⁽³⁾	2.0	2.3 Watts
Grid No. 2 Dissipation (Max.)	—	0.55 Watt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	—	0.25 Megohm
Self Bias (Max.)	3.0 ⁽³⁾	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	-1.0	-1.0 Volt
Transconductance	8000	6500 μ mhos
Plate Current	12.0	12.0 Ma
Grid No. 2 Current	—	4.0 Ma
Plate Resistance (Approx.)	5600	200,000 Ohms
Amplification Factor	45	—
Ecl for Ib = 20 μ a (Approx.)	-7.5	-9 Volts

NOTES:

- (1) Shield No. 315 tied to Pin No. 4.
- (2) 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.
- (3) 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.

6FY5

2FY5, 3FY5

VHF AMPLIFIER**High Mu Triode**

Construction	Miniature T-5½
Base	Button 7 Pin, E7-1
Basing	7FP
Outline	5-2
Maximum Diameter	0.750 In.
Maximum Seated Height	1.875 In.
Maximum Overall Height	2.125 In.

**ELECTRICAL DATA
HEATER OPERATION**

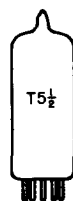
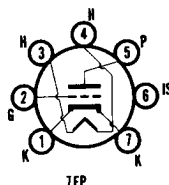
	2FY5	3FY5	6FY5
Heater Voltage	2.4	3.1	6.3 Volts
Heater Current	600	450	200 Ma
Maximum Heater Cathode Voltage			100 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Unshielded	Shielded
Input	4.75	4.75 Pf
Output	3.3	4.3 Pf
Grid to Heater (Max.)	0.28	0.28 Pf
Plate to Cathode	0.25	0.21 Pf
Grid to Cathode	3.2	3.2 Pf
Cathode to Heater	2.5	2.5 Pf
Plate to Grid	0.50	0.48 Pf

RATINGS (Absolute Maximum Rating System)

Plate Voltage (Max.)	200 Volts
Plate Voltage (Zero Plate Current) (Max.)	550 Volts
Plate Dissipation (Max.)	2.2 Watts



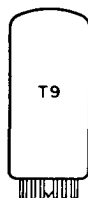
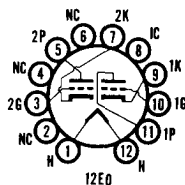
Cathode Current (Max.)	135	135	135	20 Ma
Negative Grid Voltage (Max.)	1	3.1	5	50 Volts
Grid Circuit Resistance (Max.)	11	—	—	1 Megohm
Cathode-Heater Circuit Resistance (Max.)	13,000	625	125	20,000 Ohms
CHARACTERISTICS AND TYPICAL OPERATION				
Plate Voltage	135	135	135	135 Volts
Negative Grid Bias	1	3.1	5	4.5 Volts
Plate Current	11	—	—	0.1 Ma
Transconductance	13,000	625	125	— μ mhos
Amplification Factor	70	—	—	—

VERTICAL DEFLECTION OSCILLATOR and AMPLIFIER

6FY7
11FY7, 15FY7

Double Dissimilar Triode

Construction.....Compactron T-9
Base Button 12 Pin, E12-70
Basing 12EO
Outline 9-60
Maximum Diameter 1.188 In.
Maximum Seated Height 2.500 In.
Maximum Overall Height 2.875 In.



ELECTRICAL DATA HEATER OPERATION

	15FY7	11FY7	6FY7
Heater Voltage	14.7	11.0	6.3 Volts
Heater Current	450	600	1050 Ma
Heater Warm-up Time	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)

	Section 1	Section 2
Grid to Plate: (g to p)	4.4	9.5 Pf
Input: g to (h + k)	2.2	6.5 Pf
Output: p to (h + k)	0.4	1.2 Pf

RATINGS (Design Maximum Rating System)

	Vertical Oscillator Service ⁽¹⁾ (Section 1)	Vertical Deflection Amplifier ⁽¹⁾ (Section 2)
DC Plate Voltage (Max.)	330	275 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2000 Volts
Peak Negative Grid Voltage (Max.)	400	250 Volts
Plate Dissipation (Max.)	1.0	7.0 ⁽²⁾ Watts
DC Cathode Current (Max.)	20	50 Ma
Peak Cathode Current (Max.)	70	175 Ma
Grid Circuit Resistance (Max.)	2.2	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	Section 1 (Oscillator)	Section 2 (Amplifier)
Plate Voltage	250	60
Grid Voltage	-3.0	0 ⁽³⁾
Amplification Factor	65	—
Plate Resistance (Approx.)	40,500	920 Ohms
Transconductance	1600	6500 μ mhos
Plate Current	1.4	95
Plate Current (Approx.) $E_c = -25$ Volts	—	6 Ma
Grid Voltage (Approx.) $I_b = 30 \mu a$	-5.5	— Volts
Grid Voltage (Approx.) $I_b = 50 \mu a$	—	-36 Volts

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 cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (3) Applied for short interval (two seconds maximum) so as not to damage tube.