

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Section	Triode Section
Plate Voltage	125	125 Volts
Screen Voltage	125	— Volts
Grid No. 1 Voltage	-1.0	-1.0 Volts
Amplification Factor	—	46
Plate Resistance (Approx.)	200,000	5400 Ohms
Transconductance	7500	8500 μ mhos
Plate Current	12	13.5 Ma
Screen Current	4.0	— Ma
Grid No. 1 Voltage (Approx.)		
$I_b = 10 \mu$ a	-8	-8 Volts

NOTE:

(1) With external shield (EIA 315) connected to cathode of section under test.

6JS6C

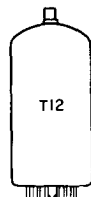
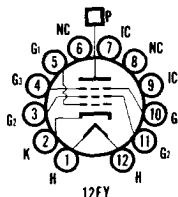
12JS6, 23JS6A, 31JS6C

Color Television Type

HORIZONTAL DEFLECTION AMPLIFIER

Beam Power Pentode

Construction.....Compactron T-12
 Base Button 12 Pin, E12-74
 Top Cap C1-1
 Basing 12FY
 Outline 12-89
 Maximum Diameter 1.563 In.
 Maximum Seated Height 3.750 In.
 Maximum Overall Height 4.125 In.



ELECTRICAL DATA

HEATER OPERATION

	12JS6	31JS6C	23JS6A	6JS6C
Heater Voltage.....	12.6	31.5	23.6	6.3 Volts
Heater Current	1125	450	600	2250 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)

Grid to Plate	0.7 Pf
Input: g_1 to $(h + k + g_2 + bp)$	24 Pf
Output: p to $(h + k + g_2 + bp)$	10 Pf

RATINGS (Design Maximum Rating System)

Horizontal Deflection Amplifier⁽¹⁾

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.)	990 Volts
Peak Positive Plate Voltage (Max.)	7500 Volts
Peak Negative Plate Voltage (Max.)	1200 Volts
Positive DC Beam Plate Voltage (Max.)	75 Volts
Grid No. 2 Voltage (Max.)	220 Volts
Peak Negative Grid No. 1 Voltage (Max.)	330 Volts
Plate Dissipation (Max.) ⁽²⁾	30 Watts
Grid No. 2 Input (Max.)	5.5 Watts
Average Cathode Current (Max.)	350 Ma
Peak Cathode Current (Max.)	1200 Ma
Grid No. 1 Circuit Resistance (Max.) ⁽²⁾	0.47 Megohms
Grid No. 1 Circuit Resistance ⁽⁴⁾	10.0 Megohms
Bulb Temperature (At Hottest Point) (Max.)	225 °C

CHARACTERISTICS AND TYPICAL OPERATION

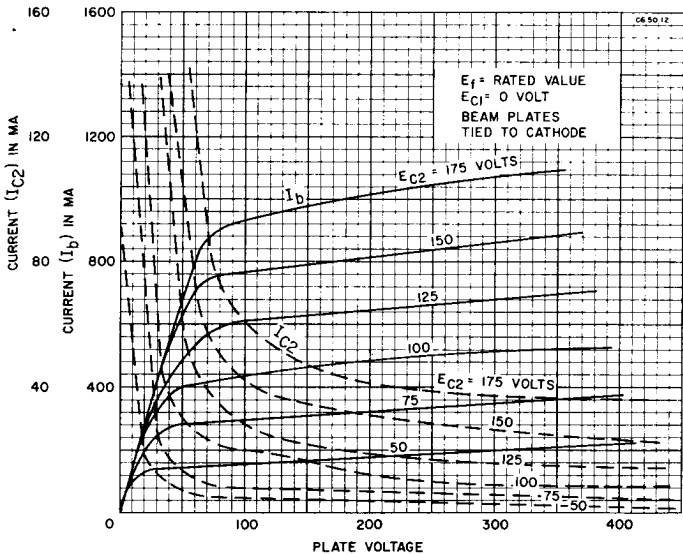
Plate Voltage	175 Volts
Beam Plate Voltage	Connected to Cathode at Socket
Grid No. 2 Voltage	125 Volts
Grid No. 1 Voltage	-25 Volts

Plate Current	130 Ma'
Grid No. 2 Current	2.8 Ma
Transconductance	11,500 μ mhos
Amplification Factor ⁽³⁾	3
Plate Resistance	5500 Ohms
Ec1 for Ib = 1 Ma (Approx.)	-54 Volts
INSTANTANEOUS PLATE KNEE VALUES	
Eb = 62 V, Ec2 = 125 V and Ec1 = 0 V; Eb = 70 V (12JS6)	
Ib = 570 Ma; and Ic2 = 34 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) With Grid Bias Feedback HV Regulation.
- (3) Amplification factor with tube operation as a triode with 125 volts on the plate and Grid No. 2 and -25 volts on Grid No. 1.
- (4) With DC or Pulse Shunt HV Regulation.

AVERAGE PLATE CHARACTERISTICS



HORIZONTAL DEFLECTION AMPLIFIER

6JT6

12JT6, 17JT6

Beam Power Pentode

Construction	Novar T-12
Base	Button 9 Pin, E9-76
Basing	9QU
Outline	
Maximum Diameter	1.563 In.
Maximum Seated Height	2.800 In.
Maximum Overall Height	3.180 In.

ELECTRICAL DATA
HEATER OPERATION

Heater Voltage	17JT6	12JT6	6JT6
Heater Current	16.8	12.6	6.3 Volts
Heater Warm-up Time	450	600	1200 Ma
	11	11	— Seconds

