

ELECTRICAL DATA

HEATER OPERATION

	19HS6	6HS6
Heater Voltage.....	18.9	6.3 Volts
Heater Current	150	450 Ma
Heater Warm-up Time	17	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 CAPACITANCE (Unshielded)

Grid No. 1 to Plate (Max.).....	0.006 Pf
Grid No. 1 to Cathode, Grid No. 3 and Internal Shield,	
Grid No. 2, and Heater	8.8 Pf
Plate to Cathode, Grid No. 3 and Internal Shield,	
Grid No. 2, and Heater	5.2 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Supply Voltage (Max.)	300 Volts
Grid No. 3 (Suppressor Grid).....	Connect to Cathode at Socket
Grid No. 2 (Screen Grid) Supply Voltage (Max.)	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 1 (Control Grid) Voltage:	
Positive Bias Value (Max.)	0 Volts
Negative Bias Value (Max.)	50 Volts
Plate Dissipation (Max.)	3 Watts
Grid No. 2 Input:	
For Grid No. 2 Voltages up to 150 Volts (Max.)	1 Watt
For Grid No. 2 Voltages Between 150	
and 300 Volts	See Rating Chart (Gen. Info. Sec.)
Maximum Circuit Values:	
Grid No. 1 Circuit Resistance:	
For Fixed Bias Operation (Max.)	0.5 Megohm
For Cathode Bias Operation (Max.)	1 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Supply Voltage.....	75	150 Volts
Grid No. 3	Connected to Cathode at Socket	
Grid No. 2 Supply Voltage.....	75	75 Volts
Grid No. 1 Supply Voltage.....	0	0 Volts
Cathode Resistor	68	68 Ohms
Amplification Factor	50	—
Plate Resistance (Approx.)	—	0.5 Megohm
Transconductance	—	9500 μ mhos
Plate Current	—	8.8 Ma
Grid No. 2 Current	—	2.8 Ma
Grid No. 1 Voltage (Approx.) for Plate Current of 20 μ a	—	-4 Volts

Color Television Type

SYNC SEPARATOR/CLIPPER

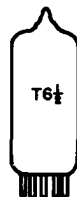
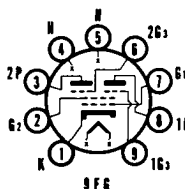
and AGC

6HS8

3HS8, 4HS8

Double Pentode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	.9FG
Outline	.6-3
Maximum Diameter	0.875 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.



ELECTRICAL DATA

HEATER OPERATION

	3HS8	4HS8	6HS8
Heater Voltage.....	3.15	4.2	6.3 Volts
Heater Current	600	450	300 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 No. 3 to Plate (Each Section)		2.0 Pf
Grid No. 1 to All.....		6.0 Pf
Grid No. 3 (Each Section) to All		3.6 Pf
Plate (Each Section) to All		3.0 Pf
Grid No. 3 (Section 1) to Grid No. 3 (Section 2) (Max.)		0.015 Pf
RATINGS (Design Maximum Rating System)		
Plate Voltage (Each Section) (Max.)		300 Volts
Grid No. 2 Voltage (Max.)		150 Volts
Positive DC Grid No. 3 Voltage (Each Section) (Max.)		3.0 Volts
Negative DC Grid No. 3 Voltage (Each Section) (Max.)		50 Volts
Peak Positive Grid No. 3 Voltage (Each Section) (Max.)		50 Volts
Negative DC Grid No. 1 Voltage (Max.).....		50 Volts
Plate Dissipation (Each Section) (Max.)		1.1 Watts
Grid No. 2 Dissipation (Max.)		0.75 Watt
DC Cathode Current (Max.)		12 Ma
Grid No. 1 Circuit Resistance (Max.)		0.5 Megohm
Grid No. 3 Circuit Resistance (Each Section) (Max.)		0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Both Sections Operating

Plate Voltage (Each Section)	100	100 Volts
Grid No. 2 Voltage	67.5	67.5 Volts
Grid No. 3 Voltage (Each Section)	-10	0 Volts
Grid No. 1 Voltage	Note 1	Note 1
Plate Current (Each Section)	—	2.0 Ma
Grid No. 2 Current	7.0	4.4 Ma
Cathode Current	7.1	8.5 Ma

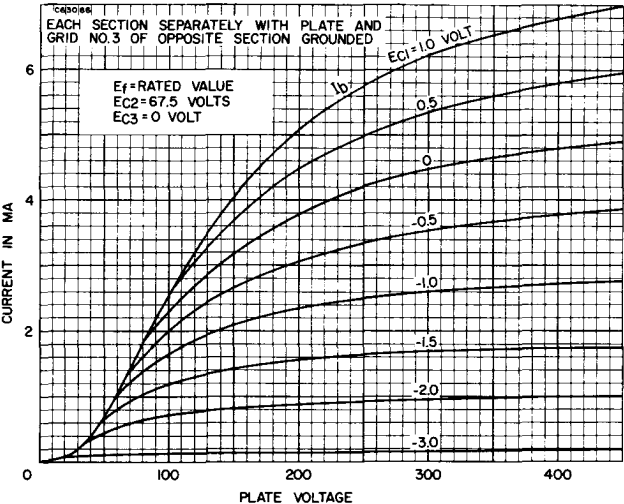
Each Section Operating Separately with Plate and Grid No. 3 of Opposite Section Grounded

Plate Voltage	100	100 Volts
Grid No. 2 Voltage	67.5	67.5
Grid No. 3 Voltage	0	0 Volt
Grid No. 1 Voltage	0	— Volt
Plate Current	—	2.0 Ma
Grid No. 3 Transconductance	—	450 μ mhos
Grid No. 1 Transconductance	1100	— μ mhos
Ec3 for Ib = 100 μ a (Approx.)	—	-3.5 Volts
Ec1 for Ib = 100 μ a (Approx.)	—	-2.3 Volts

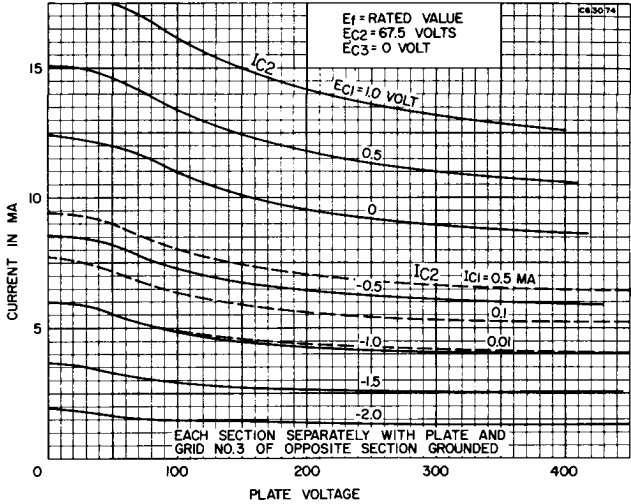
NOTE:

(1) Grid current adjusted for 100 μ a dc.

AVERAGE PLATE CHARACTERISTICS



AVERAGE SCREEN CHARACTERISTICS



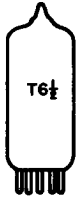
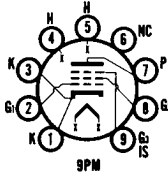
IF AMPLIFIER

6HT6

3HT6, 4HT6

Semi-remote Cutoff Pentode

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



ELECTRICAL DATA
HEATER OPERATION

	3HT6	4HT6	6HT6
Heater Voltage.....	3.15	4.2	6.3 Volts
Heater Current	600	450	300 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

	Shielded (1)	Unshielded
Grid 1 to Plate	0.024	0.031 Pf
Input	8.70	8.70 Pf
Output	3.00	2.15 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	250 Volts
Grid 2 Supply Voltage (Max.)	250 Volts
Grid 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Plate Dissipation (Max.)	2.5 Watts
Grid 2 Dissipation (Max.)	0.6 Watts
Grid 1 Negative Voltage (Max.)	50 Volts
Cathode Current (Max.)	25 Ma
Grid 1 Circuit Resistance:	
Cathode Resistor Bias (Max.)	1 Megohm
Fixed Bias (Max.)	0.25 Megohm