

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Pentode Section	
Grid No. 1 to Plate (Pg1 to Pp)	0.075 Pf
Input: Pg1 to (h + Pk + Pg2 + Pg3 + IS)	9.5 Pf
Output: Pp to (h + Pk + Pg2 + Pg3 + IS)	4.4 Pf

Triode Section	
Grid to Plate (Tg to Tp)	3.8 Pf
Input: Tg to (h + Tk + Pk + Pg3 + IS)	2.6 Pf
Output: Tp to (h + Tk + Pk + Pg3 + IS)	3.0 Pf

RATINGS (Design Maximum Rating System)

	Pentode Section	Triode Section
Plate Voltage (Max.)	225	300 Volts
Screen Voltage (Max.)	160	— Volts
Positive DC Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	4.5	1.0 Watts
Screen Dissipation (Max.)	2.0	— Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.5 Megohm
Cathode Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Section			Triode Section
Plate Voltage	30	30	200	250 Volts
Screen Voltage	140	140	140	— Volts
Grid No. 1 Voltage	0	-1.0	-2.0	-2.0 Volts
Amplification Factor	—	—	—	110
Plate Resistance (Approx.)	—	—	150,000	52,000 Ohms
Transconductance	—	11,000	9500	2100 μ mhos
Plate Current	30	16	12	1.1 Ma
Screen Current	13.5	9.5	2.5	— Ma
Grid Voltage (Approx.) Ib = 10 μ a	—	—	—	-3.6 Volts
Grid No. 1 Voltage (Approx.) Ib = 500 μ a	—	-4	-4.2	— Volts

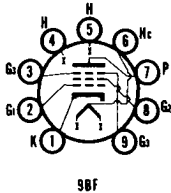
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Color Television Type

VIDEO AMPLIFIER

Sharp Cutoff Pentode

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



ELECTRICAL DATA

HEATER OPERATION

	Series	Parallel
Heater Voltage	11.0	5.5 Volts
Heater Current	300	600 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 (Unshielded)

Grid No. 1 to Plate (Max.)	0.16 Pf
Input: g1 to (k, g3 + IS, g2, h)	14 Pf
Output: p to (k, g3 + IS, g2, h)	5.0 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Voltage (Max.)	330 Volts
Grid No. 2 Supply Voltage (Max.)	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 1 Voltage:	
Positive Bias Value (Max.)	0 Volt
Plate Dissipation (Max.)	7 Watts

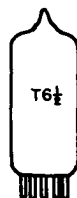
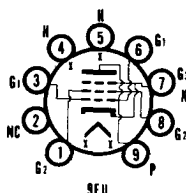
Grid No. 2 Input:	
Ec2 up to 165 V (Max.)	1 Watt
Ec2 from 165 V to 330 V	See Rating Chart (Gen. Info. Sec.)
Grid No. 1 Circuit Resistance:	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.25 Megohm
CHARACTERISTICS AND TYPICAL OPERATION	
Plate Supply Voltage	200 Volts
Grid No. 3 Voltage	0 Volt
Grid No. 2 Supply Voltage	135 Volts
Grid No. 1 Supply Voltage	0 Volt
Cathode Resistor	47 Ohms
Plate Resistance (Approx.)	40 K Ohms
Transconductance	30,000 μ mhos
DC Plate Current	30 Ma
DC Grid No. 2 Current	5.2 Ma
Cutoff DC Grid No. 1 Voltage for Ib = 100 μ a	-4.5 Volts

AUDIO OUTPUT AMPLIFIER

12AB5

Beam Power Pentode

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



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage ⁽¹⁾	12.6 Volts
Heater Current	200 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 (Unshielded)

Grid to Plate	0.7 Pf
Input: g1 to (h + k + g2 + g3)	8.0 Pf
Output: p to (h + k + g2 + g3)	8.5 Pf

RATINGS (Design Center Rating System)

Class A1 Amplifier

Plate Voltage (Max.)	315 Volts
Plate Dissipation (Max.)	12 Watts
Grid No. 2 Voltage (Max.)	285 Volts
Grid No. 2 Dissipation (Max.)	2 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier (Single Tube)

Plate Voltage	180	250	250 Volts
Grid No. 2 Voltage	180	200	250 Volts
Grid No. 1 Voltage	-8.5	—	-12.5 Volts
Cathode Bias Resistor	—	270	— Ohms
Peak AF Grid No. 1 Voltage	8.5	10.5	12.5 Volts
Zero Signal Plate Current	29	33.5	45 Ma
Maximum Signal Plate Current	30	36.0	47 Ma
Zero Signal Grid No. 2 Current	3.0	1.6	4.5 Ma
Maximum Signal Grid No. 2 Current	4.0	3.2	7.0 Ma
Plate Resistance (Approx.)	50,000	—	50,000 Ohms
Transconductance	3700	4000	4100 μ mhos
Load Resistance	5500	6000	5000 Ohms
Maximum Signal Power Output	2.0	3.3	4.5 Watts
Total Harmonic Distortion	8	12	8 Percent