

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

Plate Supply Voltage.....	125 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket
Grid No. 2 Supply Voltage.....	125 Volts
Cathode Resistor	56 Ohms
Plate Current	13 Ma
Grid No. 2 Current	3.2 Ma
Transconductance	15,000 μ mhos
Plate Resistance (Approx.)	180,000 Ohms
Grid No. 1 Voltage for $I_b = 100 \mu a$	-3 Volts

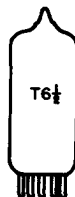
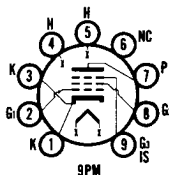
6JC6A

3JC6A, 4JC6A

Color Television Type

IF AMPLIFIER**Sharp 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 1.938 In.
 Maximum Overall Height 2.188 In.

**ELECTRICAL DATA****HEATER OPERATION**

	3JC6A	4JC6A	6JC6A
Heater Voltage.....	3.5	4.5	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 CAPACITANCE (Unshielded)

Grid No. 1 to Plate	0.019 Pf
Input: g_1 to ($h + k + g_2 + g_3 + IS$).....	8.5 Pf
Output: p to ($h + k + g_2 + g_3 + IS$).....	3.0 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	330 Volts
Grid No. 3 Voltage (Max.)	0 Volt
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)	0 Volt
Grid No. 2 Input	
E_{c2} up to 165 Volts (Max.)	0.7 Watts
$E_{c2} = 165$ to 330 Volts	See Rating Chart (Gen. Info. Sec.)
Plate Dissipation (Max.)	3.1 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.25 Megohm
Cathode Bias (Max.)	1 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

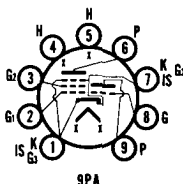
Plate Supply Voltage.....	125 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket
Grid No. 2 Supply Voltage.....	125 Volts
Cathode Resistor	56 Ohms
Plate Current	14 Ma
Grid No. 2 Current	3.4 Ma
Transconductance	16,000 μ mhos
Plate Resistance (Approx.)	180,000 Ohms
Grid No. 1 Voltage for $I_b = 100 \mu a$	-3 Volts

VHF OSCILLATOR and MIXER

6JC8

Medium Mu Triode and
Sharp Cutoff Pentode

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



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	450 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

	Shielded	Unshielded
Triode Section		
Grid to Plate	1.2	1.3 Pf
Input: g to (h + k)	3.2	2.8 Pf
Output: p to (h + k)	0.90	0.44 Pf
Pentode Section		
Grid No. 1 to Plate (Max.)	0.018	0.038 Pf
Input: g1 to (k + g3 + g2 + h)	5.0	4.8 Pf
Output: p to (k + g3 + g2 + h)	1.6	0.9 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)	0.036	0.05 Pf
Pentode Plate to Triode Plate (Max.)	0.012	0.075 Pf
Heater to Cathode	6.5 ^(a)	6.5 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Converter Service		
Plate Voltage (Max.)	275	275 Volts
Grid No. 2 Supply Voltage (Max.)	—	275 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	1.7	2.3 Watts
Grid No. 2 Input:		
For Grid No. 2 Voltages up to 138 Volts (Max.)	—	0.45 Watt
For Grid No. 2 Voltages Between 138 and 275 Volts	See Rating Chart (Gen. Info. Sec.)	
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	—	0.1 Megohm
Self Bias (Max.)	—	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 3	Connected to Pin No. 3 at Socket	
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	-1.0	-1.0 Volt
Plate Current	12	9.0 Ma
Grid No. 2 Current	—	2.2 Ma
Transconductance	6500	5500 μ mhos
Amplification Factor	40	—
Plate Resistance (Approx.)	6000	300,000 Ohms
Ec1 for Ib = 20 μ a (Approx.)	-7	-6.5 Volts
Gm with Eb = 100 V, Ec2 = 70 V and Ec1 = 0 V	—	5700 μ mhos