

Screen Grid Current	5.5 Ma
Transconductance	10,000 μ mhos
Internal Plate Resistance	45,000 Ohms
Amplification Factor—Grid No. 1 to Grid No. 2	21

6GX7**4GX7, 5GX7, 8GX7**

Color Television Type

VHF OSCILLATOR and MIXER**Medium Mu Triode and Sharp Cutoff Pentode**

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

ELECTRICAL DATA**HEATER OPERATION**

	4GX7	5GX7	8GX7	6GX7
Heater Voltage	4.2	5.6	7.7	6.3 Volts
Heater Current	600	450	300	400 Ma
Heater Warm-up Time	11	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⁾**Triode Section**

Grid to Plate	1.2 Pf
Input: g1 to (k + Pg3 + IS + h)	2.3 Pf
Output: p to (k + Pg3 + IS + h)	1.9 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.005 Pf
Input: g1 to (k + g3 + IS + g2 + h)	5.4 Pf
Output: p to (k + g3 + IS + g2 + h)	3.3 Pf
Grid No. 1 to Grid No. 2	1.6 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	275	275 Volts
Grid No. 2 Supply Voltage (Max.)	—	275 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Cathode Current (Max.)	20	20 Ma
Plate Dissipation (Max.)	1.5	2.2 Watts
Grid No. 2 Dissipation (Max.)	—	0.45 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Maximum Grid No. 1 Circuit Resistance		
Self Bias (Max.)	1.0	0.5 Megohm
Fixed Bias (Max.)	0.5	0.25 Megohm

Control grid to cathode spacing of the pentode section of this type is of such low order of magnitude as to preclude the use of voltage between these elements of more than 30 volts dc or peak ac in commercial tube checkers and shorts indicating devices, particularly where mechanical excitation of the tube is employed.

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

	Triode Section		Pentode Section	
Plate Voltage	100	125	120	125 Volts
Grid No. 2 Voltage	—	—	90	125 Volts
Grid No. 1 Voltage	—	-1.0	—	-1.0 Volt
Cathode Bias Resistor	0.1	—	0.1	— Megohm
Plate Current	12.5	13	8.5	8 Ma
Grid No. 2 Current	—	—	2.8	2.5 Ma
Transconductance	8700	8500	13,000	11,000 μ mhos
Amplification Factor	—	40	—	—
Plate Resistance (Approx.)	—	4700	—	200,000 Ohms
Ec1 for Ib = 20 μ a (Approx.)	-6.0	—	-2.5	— Volts

NOTE:

(1) Shield connected to cathode.

