

DC Grid-No.2 Voltage .....	220	volts
DC Grid-No.1 Voltage .....	-55	volts
Peak Negative-Pulse Grid-No.1 Voltage .....	330	volts
Peak Cathode Current .....	550	mA
Average Cathode Current .....	175	mA
Plate Dissipation* .....	17.5	watts
Grid-No.2 Input .....	3.5	watts
Bulb Temperature (at hottest point) .....	249	°C

**MAXIMUM CIRCUIT VALUE**

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation\* .....

1

megohm

# Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

\* A bias resistor or other means is required to protect the tube in absence of excitation.

**6GJ7**

Refer to chart at end of section.

**6GJ7/  
ECF801**

**4GJ7/XCF801  
5GJ7/LCF801  
8GJ7/PCF801**

**MEDIUM-MU TRIODE—  
SHARP-CUTOFF PENTODE**

Miniature types used as combined oscillator and mixer tubes in color and black-and-white television receivers utilizing an intermediate frequency in the order of 40 MHz. Outlines section, 6J; requires miniature 9-contact socket. Types 4GJ7/XCF801, 5GJ7/LCF801, and 8GJ7/PCF801 are identical with type 6GJ7/ECF801 ratings.

**9QA**

except for heater

Heater Voltage (ac/dc)	4GJ7/ XCF801	5GJ7/ LCF801	6GJ7/ ECF801	8GJ7/ PCF801	
Heater Current .....	4.1	5.6	6.3	8	volts
Peak Heater-Cathode Voltage <sup>Δ</sup> .....	0.6	0.45	0.41	0.3	ampere
	±110 max	±110 max	±100 max	±110 max	volts

**Class A<sub>1</sub> Amplifier**

**MAXIMUM RATINGS (Design-Maximum Values)**

	Triode Unit	Pentode Unit	
Plate-Supply Voltage .....	600	600	volts
DC Plate Voltage .....	140	275	volts
Grid-No.2 (Screen-Grid) Supply Voltage .....	—	600	volts
DC Grid-No.2 Voltage .....	—	275	volts
DC Grid-No.1 (Control-Grid) Voltage .....	—	-50	volts
Cathode Current .....	22	20	mA
Plate Dissipation .....	1.8	2.4	watts
Grid-No.2 Input* .....	—	0.55	watt

**CHARACTERISTICS**

DC Plate Voltage .....	100	170	volts
DC Grid-No.2 Voltage .....	—	120	volts
DC Grid-No.1 Voltage .....	-3	-1.2	volts
Amplification Factor .....	20	55*	
Plate Resistance (Approx.) .....	—	0.35	megohm
Transconductance .....	9000	11000	μmhos
Plate Current .....	15	10	mA
Grid-No.2 Current .....	—	3	mA
Grid-No.1 Voltage for grid-No.1 current of 0.3 μA .....	-1.3 max	-1.3 max	volts
Grid-No.1-Circuit Resistance:			
For fixed-bias operation .....	0.5	1	megohm
For cathode-bias operation .....	0.5	2.2	megohms

<sup>Δ</sup> The hum should be minimized in intercarrier applications by limiting the heater-cathode voltage to 100 volts rms, and in AM receivers to 50 volts rms.

\* Grid No.2 to grid No.1, approximate value.

• When control-grid bias is between -1.5 and -2 volts, screen-grid dissipation is limited to 0.50 watt. When this bias is greater than -2 volts, maximum screen-grid dissipation is 0.36 watt.

**6GJ8**

Refer to chart at end of section.