

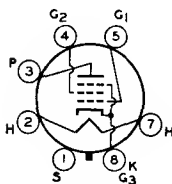
CHARACTERISTICS

Plate Voltage	125	volts
Grid Voltage	1	volt
Amplification Factor	57	
Plate Resistance (Approx.)	13600	ohms
Transconductance	4200	μ mhos
Plate Current	4.2	mA
Grid Voltage (Approx.) for plate current of 20 μ A	-4	volts

Refer to chart at end of section.

6F5

Refer to chart at end of section.

6F5GT

75

POWER PENTODE

Metal type used in the audio output stage of ac receivers. **Outlines section, 2B;** requires octal socket. This tube, like other power-handling tubes, should be adequately ventilated. **Heater:** volts (ac/dc), 6.3; amperes, 0.7; maximum heater-cathode volts, 90 peak.

6F6

Class A₁ Amplifier

	Pentode Connection	Triode Connection ^A	
MAXIMUM RATINGS (Design-Maximum Values)			
Plate Voltage	375	350	volts
Grid-No.2 (Screen-Grid) Voltage	285	—	volts
Plate Dissipation	11	10	watts
Grid-No.2 Input	3.75	—	watts

TYPICAL OPERATION

Plate Voltage	250	285	250	volts
Grid-No.2 Voltage	250	285	—	volts
Grid-No.1 (Control-Grid) Voltage	—16.5	—20	—20	volts
Peak AF Grid-No.1 Voltage	16.5	20	20	volts
Zero-Signal Plate Current	34	38	31	mA
Maximum-Signal Plate Current	36	40	34	mA
Zero-Signal Grid-No.2 Current	6.5	7	—	mA
Maximum-Signal Grid-No.2 Current	10.5	13	—	mA
Amplification Factor	—	—	6.8	
Plate Resistance (Approx.)	8000	7800	2600	ohms
Transconductance	2500	2550	2600	μ mhos
Load Resistance	7000	7000	4000	ohms
Total Harmonic Distortion	8	9	6.5	per cent
Maximum-Signal Power Output	3.2	4.8	0.85	watts

^ Grid No.2 connected to plate.

Push-Pull Class AB₁ Amplifier

MAXIMUM RATINGS (Same as for class A₁ amplifier)

TYPICAL OPERATION (Values are for two tubes)

Plate Voltage	315	volts
Grid-No.2 Voltage	285	volts
Grid-No.1 Voltage	-24	volts
Peak AF Grid-No.1-to-Grid-No.1 Voltage	48	volts
Zero-Signal Plate Current	62	mA
Maximum-Signal Plate Current	80	mA
Zero-Signal Grid-No.2 Current	12	mA
Maximum-Signal Grid-No.2 Current	19.5	mA
Effective Load Resistance (Plate-to-plate)	10000	ohms
Total Harmonic Distortion	4	per cent
Maximum-Signal Power Output	11	watts

MAXIMUM CIRCUIT VALUES

Grid-No.1 Circuit Resistance:		
For fixed-bias operation	0.1	megohm
For cathode-bias operation	0.5	megohm

Refer to chart at end of section.

6F6G

Refer to chart at end of section.

6F6GT

Refer to chart at end of section.

6F7

Refer to chart at end of section.

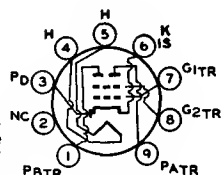
6F8G

Refer to chart at end of section.

6F8G

6FA7**DIODE—SHARP-CUTOFF,
TWIN-PLATE TETRODE**

Miniature type used in television receivers and in frequency-divider and complex-wave generator circuits of electronic musical instruments. Outlines section, 6E; requires miniature 9-contact socket.

**9MR**

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.3	ampere
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Tetrode Unit:		
Grid No.1 to Plate A	0.040	pF
Grid No.1 to Plate B	0.030 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Internal Shield	5.5	pF
Plate A to Cathode, Heater, Grid No.2, and Internal Shield	1.8	pF
Plate B to Cathode, Heater, Grid No.2, and Internal Shield	1.8	pF
Tetrode Grid No.1 to Diode Plate	0.022	pF
Tetrode Plate A to Diode Plate	0.020 max	pF
Tetrode Plate B to Diode Plate	0.055	pF

Class A₁ Amplifier**CHARACTERISTICS (Tetrode Unit)**

Plate A and Plate B connected together

Plate Voltage	100	volts
Grid-No.2 Voltage	100	volts
Grid-No.1 Supply Voltage	0	volts
Grid-No.1 Resistor (Bypassed)	2.2	megohms
Plate Resistance (Approx.)	90000	ohms
Transconductance	8200	μmhos
Plate Current	3.8	mA
Grid-No.2 Current	1.7	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—4	volts

Using either Plate A or B, with unused plate grounded

Plate Voltage	100	volts
Grid-No.2 Voltage	100	volts
Grid-No.1 Supply Voltage	0	volts
Grid-No.1 Resistor (Bypassed)	2.2	megohms
Plate Resistance (Approx.)	130000	ohms
Transconductance	1900	μmhos
Plate Current	2.2	mA
Grid-No.2 Current	3	mA

Frequency Divider and Complex-Wave Generator

Tetrode Unit

MAXIMUM RATINGS (Design-Maximum Values)

Plate-A Voltage	330	volts
Plate-B Voltage	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage:		
Negative-bias value	50	volts
Positive-bias value	0	volts
Plate-A Dissipation	1.5	watts
Plate-B Dissipation	1.5	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	0.65	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 98	

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for grid-No.1-resistor-bias operation	2.2	megohms
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Diode Unit

MAXIMUM RATINGS (Design-Maximum Values)

Plate Current	1	mA
CHARACTERISTICS, Instantaneous Value		
Tube Voltage Drop for plate current of 2 mA	10	volts