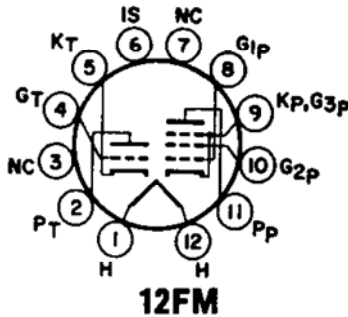


Plate Resistance (Approx.)	54000	58000	ohms
Transconductance	1800	1200	μ mhos
Plate Current	0.8	1	mA

Diode Units

MAXIMUM RATINGS (Design-Maximum Values)

Plate Current (Each Unit)	5.5	mA
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**HIGH-MU TRIODE—
POWER PENTODE**

6T9

Duodecar type used in audio-frequency circuits. The triode unit is used as a voltage amplifier; the pentode unit is used as a power amplifier. Outlines section, 8B; requires duodecar 12-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.93	ampere
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Pentode Section:		
Grid No.1 to Plate	0.2	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	11	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	11	pF
Triode Unit:		
Grid to Plate	2.6	pF
Grid to Cathode, Heater, and Internal Shield	3.4	pF
Plate to Cathode, Heater, and Internal Shield	1.1	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)	Triode Unit	Pentode Unit	
Plate Voltage	300	275	volts
Grid-No.2 (Screen-Grid) Voltage	—	275	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	1.5	12	watts
Grid-No.2 Input	—	2	watts

CHARACTERISTICS (Triode Unit)

Plate Voltage	250	volts
Grid Voltage	—2	volts
Amplification Factor	95	
Plate Resistance (Approx.)	45000	ohms
Transconductance	2100	μ mhos
Plate Current	1.5	mA

TYPICAL OPERATION (Pentode Unit)

Plate Voltage	250	volts
Grid-No.2 Voltage	250	volts
Grid-No.1 Voltage	—8	volts
Peak AF Grid-No.1 Voltage	8	volts
Zero-Signal Plate Current	35	mA
Maximum-Signal Plate Current	39	mA
Zero-Signal Grid-No.2 Current	2.5	mA
Maximum-Signal Grid-No.2 Current	7	mA
Plate Resistance (Approx.)	0.1	megohm
Transconductance	6500	μ mhos
Load Resistance	5000	ohms
Total Harmonic Distortion (Approx.)	10	per cent
Maximum-Signal Power Output	4.2	watts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:	Triode Unit	Pentode Unit	
For fixed-bias operation	0.5	0.25	megohm
For cathode-bias operation	1*	0.5	megohm

* For cathode-bias operation of the triode unit, a maximum resistance of 10 megohms can be used provided the plate dissipation never exceeds 0.25 watt.