

Class A₁ Amplifier (Triode Connection)MAXIMUM RATINGS (Same as for Class A₁ Amplifier)

TYPICAL OPERATION

Plate Voltage	250	volts
Grid-No.1 Voltage	—20	volts
Peak AF Grid-No.1 Voltage	20	volts
Amplification Factor	8	
Plate Resistance (Approx.)	1700	ohms
Transconductance	4700	μmhos
Zero-Signal Plate Current	40	mA
Maximum-Signal Plate Current	44	mA
Load Resistance	5000	ohms
Total Harmonic Distortion (Approx.)	5	per cent
Maximum-Signal Power Output	1.4	watts

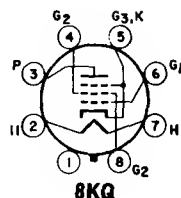
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Refer to chart at end of section.

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POWER PENTODE

Glass octal type used as audio-frequency power-out-tube in high-quality audio applications. Outlines section, 13D; requires octal socket. Heater: volts (ac/dc), 6.3; amperes, 0.8; maximum heater-cathode volts, ± 200 peak, 100 average.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	550	volts
Grid-No.2 (Screen-Grid) Voltage	440	volts
Cathode Current	90	mA
Plate Dissipation	19	watts
Grid-No.2 Input	3.3*	watts

TYPICAL OPERATION AND CHARACTERISTICS

Plate Voltage	300	volts
Grid-No.2 Voltage	300	volts
Grid-No.1 (Control-Grid) Voltage	—10	volts
Peak AF Grid-No.1 Voltage	10	volts
Zero-Signal Plate Current	60	mA
Maximum-Signal Plate Current	75	mA
Zero-Signal Grid-No.2 Current	8	mA
Maximum-Signal Grid-No.2 Current	15	mA
Triode Amplification Factor*	16.8	
Plate Resistance (Approx.)	29000	ohms
Transconductance	10200	μmhos
Load Resistance	3000	ohms
Total Harmonic Distortion	13	per cent
Maximum-Signal Power Output	11	watts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.3	megohm
For cathode-bias operation	1	megohm

* Grid-No.2 input may reach 6 watts during peak levels of speech and music signals.

* Triode connection, grid No.2 connected to plate.

Push-Pull Class AB₁ AmplifierMAXIMUM RATINGS (Same as for Class A₁ Amplifier)

TYPICAL OPERATION (Values are for two tubes)

	Fixed Bias	Cathode Bias	
Plate Supply Voltage	350	450	volts
Grid-No.2 Supply Voltage	350	400	volts
Grid-No.1 Supply Voltage	—15.5	—21	volts
Cathode-Bias Resistor			
(Common to both cathodes)	—	—	200 ohms
Peak AF Grid-No.1-to-Grid-No.1 Voltage	31	42	volts
Zero-Signal Plate Current	92	66	mA
Maximum-Signal Plate Current	130	144	mA
Zero-Signal Grid-No.2 Current	13	9.4	mA
Maximum-Signal Grid-No.2 Current	28.6	30	mA
Effective Load Resistance (Plate-to-plate)	6600	6600	9000 ohms
Total Harmonic Distortion	2	1.5	per cent
Maximum-Signal Power Output	30	45	watts