

EL84
Power Pentode

The Penta Laboratories EL84 is a power amplifier pentode designed for use in the audio frequency power output stage of television and radio receivers and in high fidelity amplifiers.

Electrical Characteristics

Cathode	Coated, Uni-potential
Heater Voltage	6.3 Volts
Heater Current	0.76 Amps
Heater Warm up time, minimum	15 sec
Interelectrode Capacitances	
Anode to Grid 1	0.7 pf
Anode to all except Grid 1	6.0 pf
Grid 1 to all except Anode	11 pf
Grid 1 to Heater	0.25 pf

Mechanical Characteristics

Overall Height, max	78.5 mm
Seated Height, max	71.4 mm
Diameter, max	22.2 mm
Base	Noval
Socket	PSK9CCM

Revised 01/04/00

	<p>P E N T A L A B O R A T O R I E S</p> <p>9740 COZYCROFT AVENUE * CHATSWORTH * CALIFORNIA 91311</p> <p>(800) 421-4219 * (818) 882-3872 * FAX: (818) 882-3968</p>
---	---



EL84 Power Pentode

Maximum Ratings

Plate Voltage	300	Volts
Plate Dissipation	12	Watts
Screen Grid Voltage	300	Volts
Screen Grid Dissipation	2	Watts
D.C. Cathode Current	65	mA
Heater - Cathode Voltage		
Heater Positive with Respect to Cathode	100	Volts
Heater Negative with Respect to Cathode	100	Volts
Grid 1 Circuit Resistance		
For Fixed Bias	0.3	M Ω
For Cathode Bias	1	M Ω

Typical Operating Conditions and Characteristics

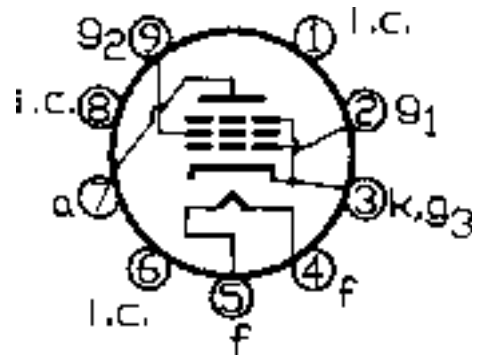
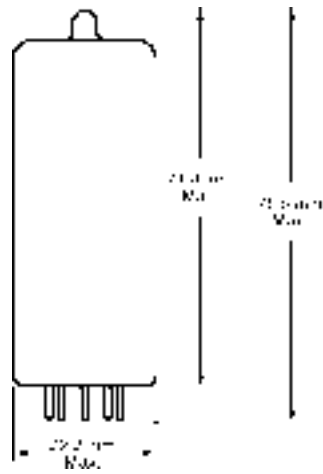
Plate Voltage	250	Volts
Screen Grid Voltage	250	Volts
Grid 1 Voltage (bias)	-7.3	Volts
Plate Resistance (approx)	40	k Ω
Transconductance	11,300	μ mhos
Plate Current	48	mA
Screen Grid Current	5.5	mA
Amplification Factor (Grid 1 to Screen Grid)	19.5	

Class A₁ Amplifier

Plate Voltage	250	Volts
Screen Grid Voltage	250	Volts
Grid 1 Voltage (bias)	-7.3	Volts
Peak AF Grid 1 Voltage	6.1	Volts
Zero Signal Plate Current	48	mA
Maximum Signal Plate Current	49.5	mA
Zero Signal Screen Grid Current	5.5	mA
Maximum Signal Screen Grid Current	10.8	mA
Load Resistance	5200	Ohms
Total Harmonic Distortion (approx)	10	%
Maximum Signal Power Output	5.7	Watts



EL84 Power Pentode



AVERAGE PLATE CHARACTERISTICS

