

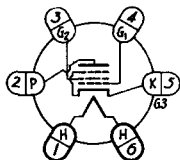
PENTODE
POWER AMPLIFIER
Heater Type Glass Bulb

The 42 is a pentode type power amplifier tube designed for service in the output stage of storage battery or a-c operated receivers. The ratings and electrical characteristics are identical with those of the types 6F6 and 6F6G.

RATINGS

Heater Voltage (a-c or d-c)	6.3	volts
Heater Current	0.7	amp
Maximum Plate Voltage	315	volts
Maximum Screen Voltage	315	volts

BOTTOM VIEW OF SOCKET



AMPLIFIER - CLASS A

	Pentode Connection	Triode Connection
Plate Voltage	250	250 max. volts
Screen Voltage	250	315 volts
Grid Bias	-16.5	-20 volts
Amplification Factor	200†	7
Plate Resistance	80000†	2600 ohms
Transconductance	2500	2700 umhos
Plate Current	34	31 ma
Screen Current	6.5	8 ma
Load Resistance (P to P)	7000	4000 ohms
Total Harmonic Dist.	7	5 percent
Power Output	3	0.85 watts

AMPLIFIER - CLASS AB - TWO TUBES

	Pentode Connection	Triode Connection†
	Fixed-Bias Self-Bias	Fixed-Bias Self-Bias
Plate Voltage	375 max.	350 max. volts
Screen Voltage	250 max.	350 max. volts
Grid Bias	-26 min.	-38 volts
Self-Bias Resistor	340 min.	730 min. ohms
Signal Pk. Volt. (G to G)	82	132 volts
No-Signal Plate Current	34	50 ma
No-Signal Screen Current	5	8 ma
Load Resistance (P to P)	10000	10000 ohms
Total Harmonic Dist.	5	7 percent
Power Output (approx.)#	19*	14**

#With one 42 triode connected as driver operated at plate voltage of 250 volts grid bias of -20 volts and plate load of approximately 10000 ohms.

*Input transformer ratio, primary to 1/2 secondary = 3.32

†Input transformer ratio, primary to 1/2 secondary = 2.5

**Input transformer ratio, primary to 1/2 secondary = 1.67

‡Input transformer ratio, primary to 1/2 secondary = 1.29

†Screen connected to plate.

‡Approximate

For additional curves refer to the type 6F6G.

