The 1AG4 is a filament type power pentode of subminiature construction designed for use in the output stage in battery operated receivers. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA

ENVENOLE: T-2 x 3 Glass
BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.048" center-to-center)
TERMINAL CONNECTIONS: (Red Dot is adjacent to Lead 1)
- Lead 1 Plate
- Lead 2 Grid #2
- Lead 3 Filament, Positive
- Lead 5 Filament, Negative
- Grid #3 ●
MOUNTING POSITION: Any

ELECTRICAL DATA

DESIGN CENTER MAXIMUM RATINGS:
- Filament Voltage (dc) 1.25 volts
- Plate Voltage 90 volts
- Grid #2 Voltage 90 volts
- Cathode Current (Zero Signal) 4 ma.

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:
- Filament Voltage (dc) 1.25 volts
- Filament Current 40 ma.
- Plate Voltage 41.4 volts
- Grid #2 Voltage 41.4 volts
- Grid #1 Voltage +3.6 volts
- Peak AF Grid #1 Voltage 3.6 volts
- Plate Resistance 18 megohms
- Transconductance 1000 μmhos
- Zero-Signal Plate Current 2.4 ma.
- Zero-Signal Grid #2 Current 0.6 ma.
- Load Resistance 12,000 ohms
- Total Harmonic Distortion (approx.) 12 percent
- Power Output 35 mw.

● Grid #3 is composed of two separate deflector plates, one of which is connected to Lead 3 and the other to Lead 5.
AVERAGE PLATE CHARACTERISTICS

Conditions:
Ec1 = 0 V
Ec2 = 41.4 V
Ef = 1.25 V

Plate Voltage - Volts
Plate or Grid #2 Current - Ma.

0 20 40 60 80
0 2 4 6

-1.0 V
-2.0 V
-3.0 V
-4.0 V
-5.0 V
-6.0 V

Plate Current
Grid #2 Current

RAYTHEON MANUFACTURING COMPANY
RECEIVING AND CATHODE RAY TUBE OPERATIONS
November 1, 1955
NEWTON 58, MASS.
AVERAGE PLATE CHARACTERISTICS
(Triode Connected)

Conditions:
Ef = 1.25 Vdc

Plate Current - Milliamperes

Plate Voltage - Volts