

**TYPE
1AE4***Excellence in Electronics*

The 1AE4 is a filament type sharp cut-off pentode of miniature construction designed for RF applications in portable equipment.

MECHANICAL DATA

ENVELOPE: T-5 1/2 Glass

BASE: Miniature Button 7-Pin

TERMINAL CONNECTIONS:

Pin 1 Negative Filament
and Grid #3

Pin 2 Plate

Pin 3 Grid #2

Pin 4 No Connection

Pin 5 Negative Filament, Grid #3

Pin 6 Grid #1

Pin 7 Positive Filament

MOUNTING POSITION: Any

ELECTRICAL DATA**DIRECT INTERELECTRODE CAPACITANCES: ($\mu\text{fds.}$) ***

Grid #1 to Plate

0.008 max.

Input

3.6

Output

4.4

DESIGN CENTER MAXIMUM RATINGS:

Filament Voltage (dc)

1.25 $\pm$ 15% volts

Plate Voltage

90 volts

Grid #2 Voltage

90 volts

Grid #1 Voltage

50 volts

Negative - Bias Value

0 volts

Positive - Bias Value

11 ma.

Total Cathode Current

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

Filament Voltage (dc)

1.25 $\pm$ 15% volts

Filament Current

0.1 amps.

Plate Voltage

90 volts

Grid #2 Voltage

90 volts

Grid #1 Voltage

0 volts

Plate Resistance

0.5 meg.

Transconductance

1550 μmhos

Plate Current

3.5 ma.

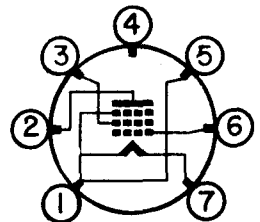
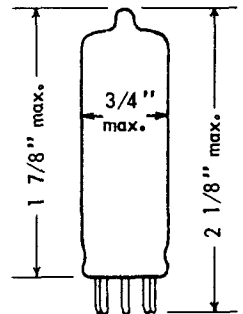
Grid #2 Current

1.2 ma.

Grid #1 Voltage (approx. for $I_b = 50 \mu\text{a.}$)

-5 volts

* With external Shield #316.



BOTTOM VIEW

6AR

Tentative Data

RAYTHEON MANUFACTURING COMPANY

RECEIVING AND CATHODE RAY TUBE OPERATIONS