



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: ($\mu\text{tds.}$) *

| | |
|------------------|------------|
| Grid #1 to Plate | 0.008 max. |
| Input | 3.6 |
| Output | 4.4 |

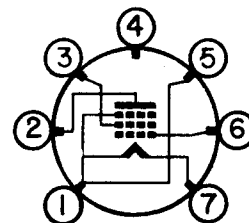
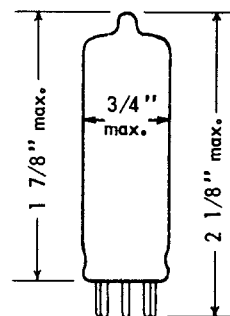
DESIGN CENTER MAXIMUM RATINGS:

| | |
|-----------------------|------------------|
| Filament Voltage (dc) | 1.25 ± 15% volts |
| Plate Voltage | 90 volts |
| Grid #2 Voltage | 90 volts |
| Grid #1 Voltage | 90 volts |
| Negative - Bias Value | 50 volts |
| Positive - Bias Value | 0 volts |
| Total Cathode Current | 11 ma. |

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

| | |
|--|-----------------------|
| Filament Voltage (dc) | 1.25 ± 15% volts |
| Filament Current | 0.1 amps. |
| Plate Voltage | 90 volts |
| Grid #2 Voltage | 90 volts |
| Grid #1 Voltage | 90 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