

# 47

## Description and Rating

### POWER-AMPLIFIER PENTODE

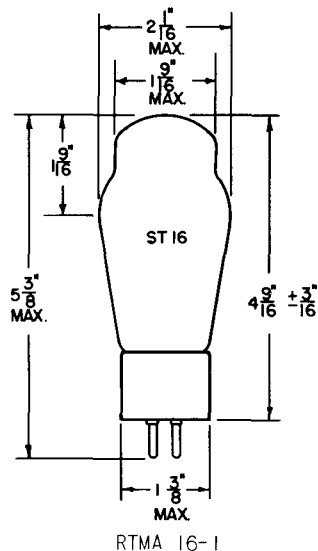
#### GENERAL DESCRIPTION

Principal Application: The 47 is a power amplifier pentode designed for use either singly or in push-Cathode . . . . . Coated Filament  
Filament Voltage (A-C or D-C) . . . . . 2.5 Volts  
Filament Current . . . . . 1.75 Amperes

pull in the output stage of home receivers.

Envelope . . . . . ST-16, Glass  
Base . . . . . A5-11, Medium 5-Pin  
Mounting Position \* . . . . . Vertical

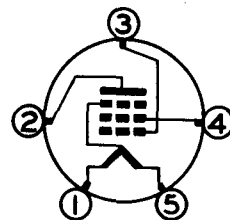
#### PHYSICAL DIMENSIONS



#### TERMINAL CONNECTIONS

Pin 1 - Filament  
Pin 2 - Plate  
Pin 3 - Grid Number 1  
Pin 4 - Grid Number 2 (Screen)  
Pin 5 - Filament

#### BASING DIAGRAM



RTMA 5B  
BOTTOM VIEW

#### DESIGN CENTER VALUES

|                                   |     |        |
|-----------------------------------|-----|--------|
| Plate Voltage . . . . .           | 250 | Volts  |
| Screen Voltage . . . . .          | 250 | Volts  |
| Grid Number 1 Circuit Resistance: |     |        |
| With Fixed Bias . . . . .         | 0.1 | Megohm |
| With Cathode Bias . . . . .       | 0.5 | Megohm |

#### MAXIMUM RATINGS

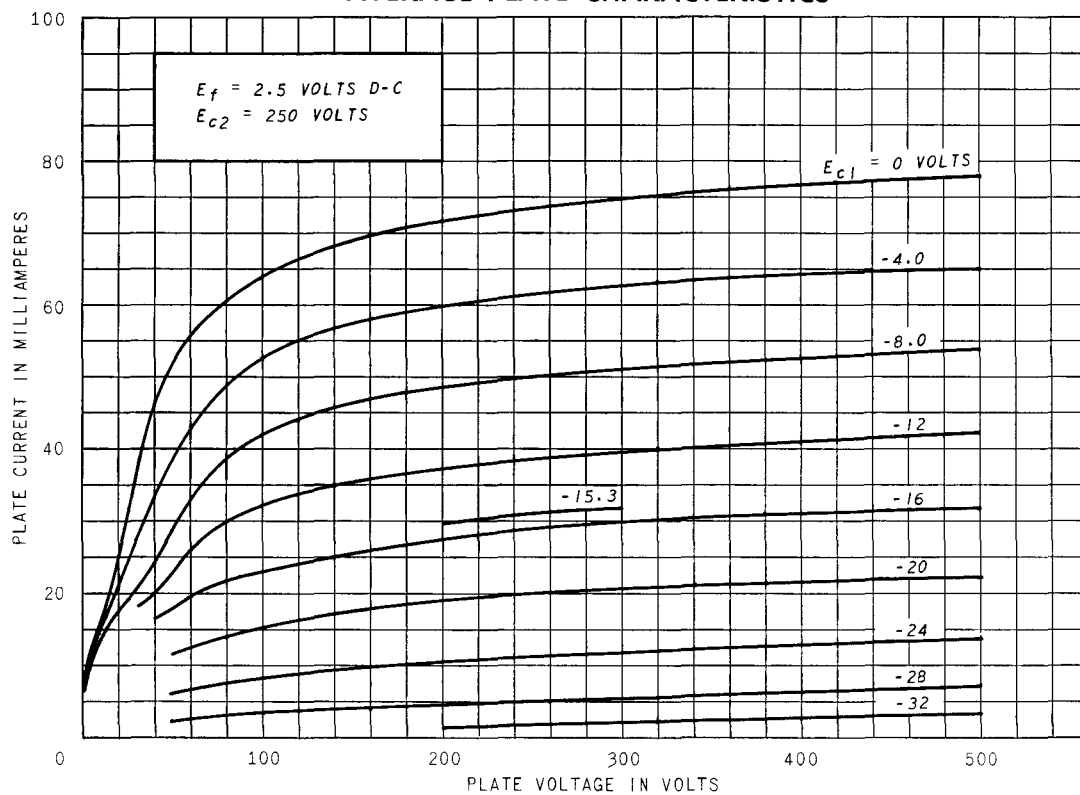
#### CLASS A<sub>1</sub> AMPLIFIER

|                                              |       |              |
|----------------------------------------------|-------|--------------|
| Plate Voltage . . . . .                      | 250   | Volts        |
| Screen Voltage . . . . .                     | 250   | Volts        |
| Grid Number 1 Voltage # . . . . .            | -15.3 | Volts        |
| Amplification Factor . . . . .               | 150   |              |
| Plate Resistance (Approx) . . . . .          | 60000 | Ohms         |
| Transconductance . . . . .                   | 2500  | Micromhos    |
| Plate Current . . . . .                      | 31    | Milliamperes |
| Screen Current . . . . .                     | 6     | Milliamperes |
| Load Resistance . . . . .                    | 7000  | Ohms         |
| Total Harmonic Distortion (Approx) . . . . . | 6     | Per Cent     |
| Power Output . . . . .                       | 2.7   | Watts        |

\* Horizontal operation permitted if pins 1 and 5 are in a vertical plane

# If filament is operated on a-c, the grid voltage should be -16.5 volts

## AVERAGE PLATE CHARACTERISTICS



TUBE DEPARTMENT

**GENERAL**  **ELECTRIC**

Schenectady 5, N. Y.