



47

Description and Rating

POWER-AMPLIFIER PENTODE

GENERAL DESCRIPTION

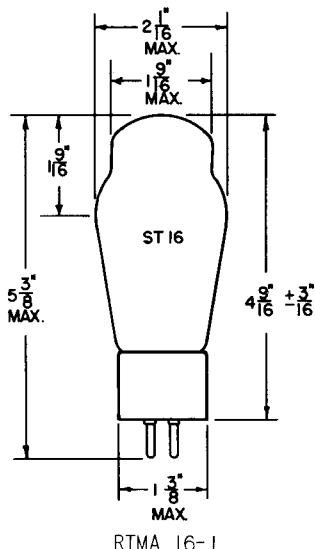
Principal Application: The 47 is a power amplifier pentode designed for use either singly or in push-pull.

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

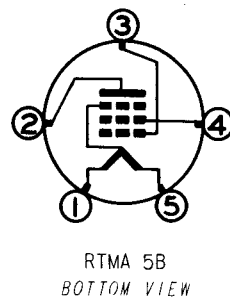
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

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

BASING DIAGRAM



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 A₁ 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

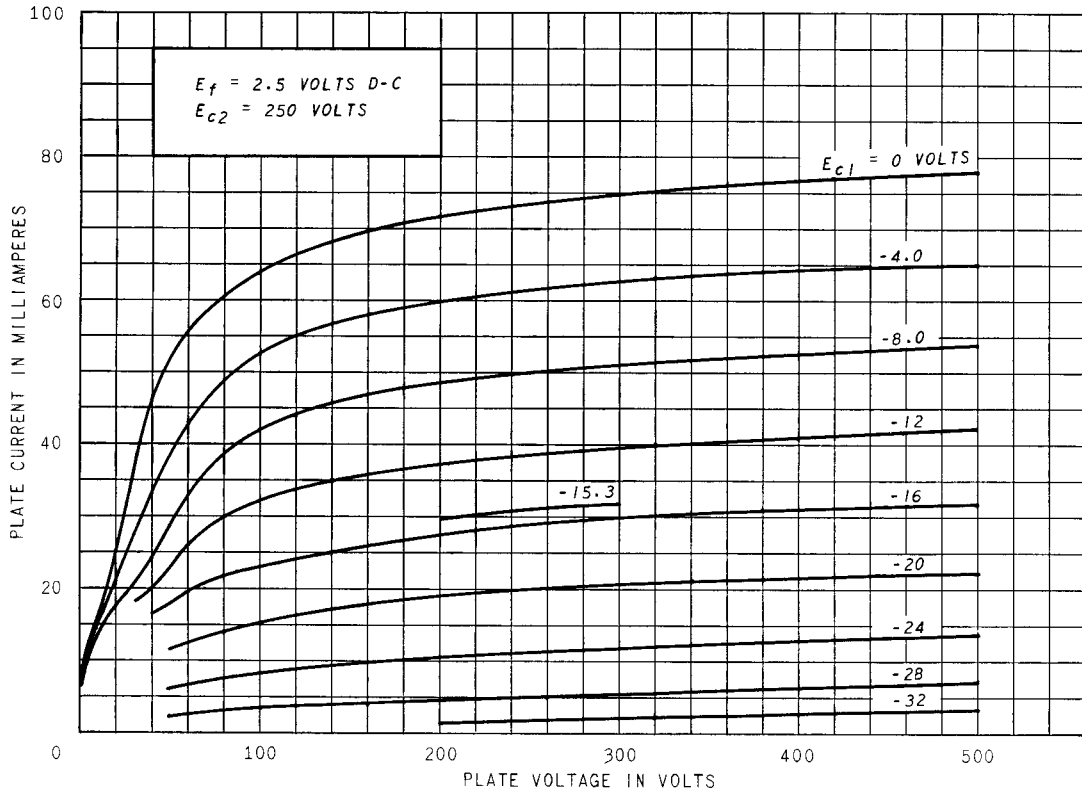
CHARACTERISTICS AND TYPICAL OPERATION

* 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



Schenectady 5, N. Y.