



6V6

Description and Rating

BEAM POWER AMPLIFIER

GENERAL DESCRIPTION

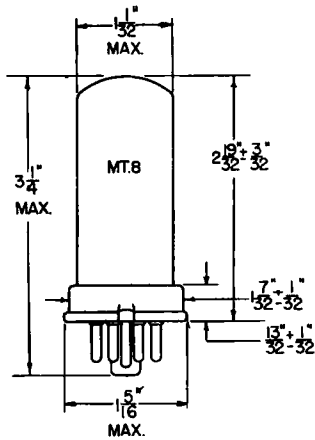
Principal Application: The 6V6 is a heater-cathode type beam power amplifier tube designed for service in the output stage of a-c or battery-operated

Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.45 Ampere
 Envelope: MT-8 Metal Shell
 Base: B7-22 Small Wafer Octal 7-Pin

equipment. Except for capacitances the electrical ratings and characteristics of the 6V6 are the same as those of the 6V6-GT.

Mounting Position: Any
 Direct Interelectrode Capacitances: *
 Grid Number 1 to Plate 0.3 μ f
 Input 10 μ f
 Output 11 μ f

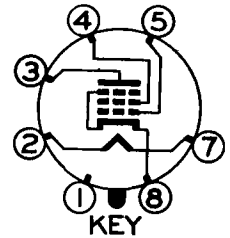
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Metal Shell
- Pin 2 - Heater
- Pin 3 - Plate
- Pin 4 - Grid Number 2 (Screen)
- Pin 5 - Grid Number 1
- Pin 7 - Heater
- Pin 8 - Cathode and Beam Plates

BASING DIAGRAM



RMA 7AC
BOTTOM VIEW

MAXIMUM RATINGS

	Design Center	Absolute	
Plate Voltage	315	345	Volts
Screen (Grid Number 2) Voltage	285	315	Volts
Screen Supply Voltage	315	345	Volts
Plate Dissipation	12	13.2	Watts
Screen Dissipation	2	2.2	Watts
D-C Heater-Cathode Voltage	90	100	Volts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A AMPLIFIER

Heater Voltage	6.3	6.3	6.3	Volts
Plate Voltage	180	250	315	Volts
Screen Voltage	180	250	285	Volts
Grid Bias Voltage **	-8.5	-12.5	-13	Volts
Peak A-F Grid Voltage	8.5	12.5	13	Volts
Plate Resistance (Approx)	58000	52000	77000	Ohms
Transconductance	3700	4100	3750	Micromhos
Zero-Signal Plate Current	29	45	34	Milliamperes
Zero-Signal Screen Current (Approx)	3	4.5	2.2	Milliamperes
Maximum-Signal Plate Current	30	47	35	Milliamperes
Maximum-Signal Screen Current (Approx)	4	7	6	Milliamperes
Load Resistance	5500	5000	8500	Ohms
Total Harmonic Distortion	8	8	12	Per Cent
Maximum-Signal Power Output	2	4.5	5.5	Watts

CLASS AB₁ PUSH-PULL AMPLIFIER §

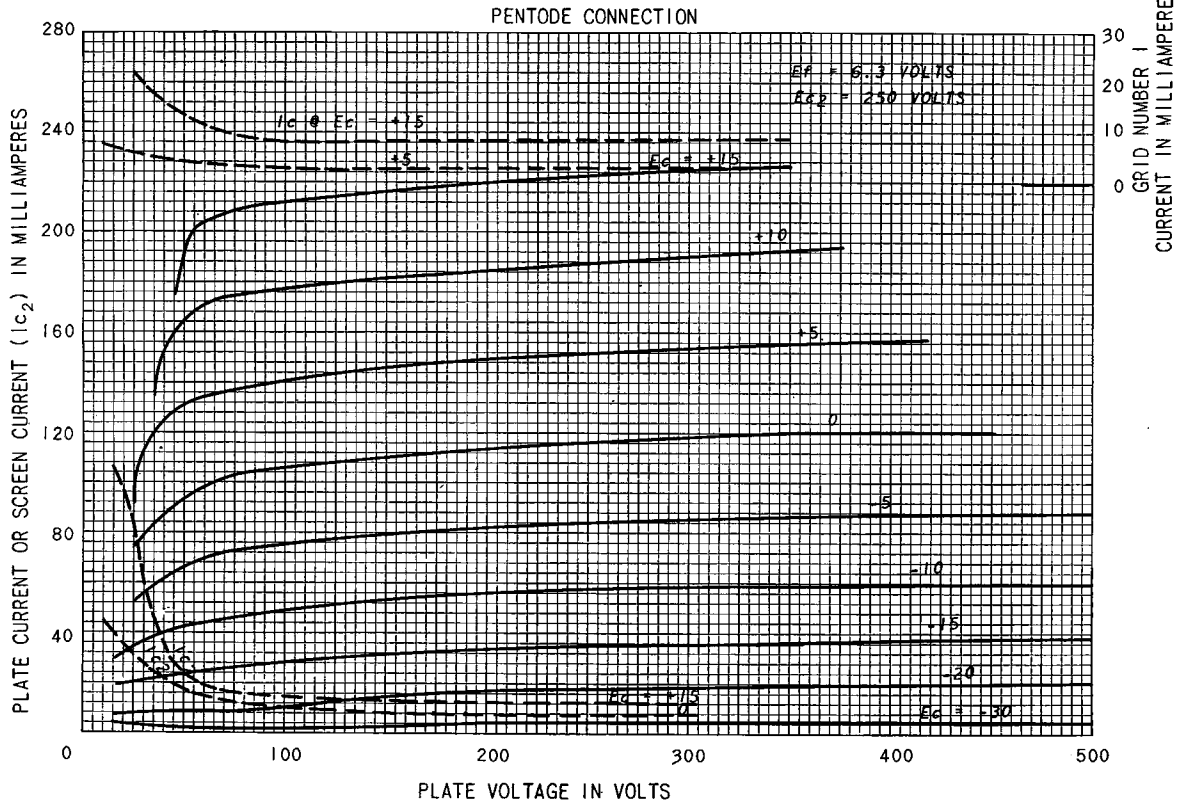
Heater Voltage	6.3	6.3	Volts
Plate Voltage	250	285	Volts
Screen Voltage	250	285	Volts
Grid Bias Voltage **	-15	-19	Volts
Peak A-F Grid-to-Grid Voltage	30	33	Volts
Plate Resistance (Approx)	60000	65000	Ohms
Transconductance	3750	3600	Micromhos
Zero-Signal Plate Current	70	70	Milliamperes
Zero-Signal Screen Current (Approx)	5	4	Milliamperes
Maximum-Signal Plate Current	79	92	Milliamperes
Maximum-Signal Screen Current (Approx)	13	13.5	Milliamperes
Effective Load Resistance (Plate to Plate)	10000	8000	Ohms
Total Harmonic Distortion	5	3.5	Per Cent
Maximum-Signal Power Output	10	14	Watts

* Approximate values with metal shell connected to cathode.

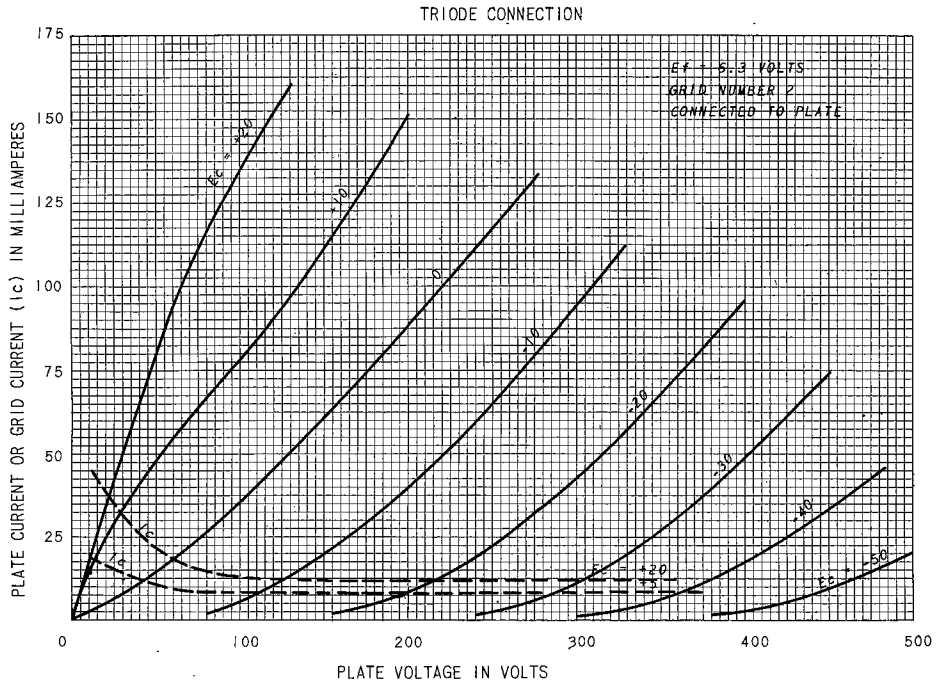
** The d-c resistance in the grid circuit, under maximum rated conditions, should not exceed 0.1 megohm for fixed bias operation and 0.5 megohm for cathode bias operation.

§ Unless otherwise indicated the values given are for two tubes.

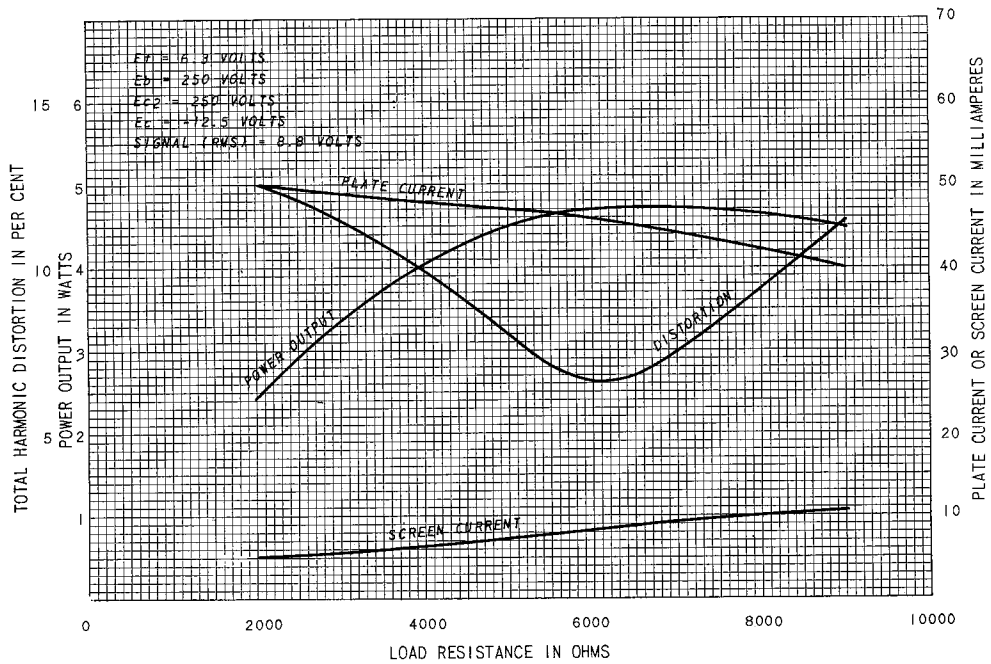
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



OPERATION CHARACTERISTICS



TUBE DEPARTMENT
GENERAL  **ELECTRIC**
Schenectady 5, N. Y.