

**6AS6**

**Description and Rating**

**RADIO-FREQUENCY-AMPLIFIER PENTODE**

**GENERAL DESCRIPTION**

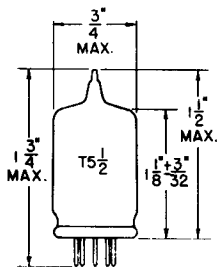
Principal Application: The 6AS6 is a miniature sharp-cut-off pentode whose control grid and suppressor grid can be used as independent control elements.

Cathode: . . . . . Coated Unipotential  
 Heater Voltage (A-C or D-C) . . . . . 6.3 Volts  
 Heater Current . . . . . 0.175 Ampere  
 Envelope: . . . . . T-5½ Glass  
 Base: . . . . . E7-1, Miniature Button 7-Pin  
 Mounting Position: . . . . . Any

The 6AS6 is suitable for use in gated amplifiers, gain-controlled amplifiers, delay circuits, and mixer circuits.

Direct Interelectrode Capacitances: #  
 Grid 1 to Plate (Max) . . . . . 0.02 μf  
 Input (Grid 1 to All) . . . . . 4.0 μf  
 Input (Grid 3 to All) . . . . . 3.4 μf  
 Output . . . . . 3.0 μf  
 Coupling (Grid 1 to Grid 3)(Max) . . . . . 0.15 μf

**PHYSICAL DIMENSIONS**

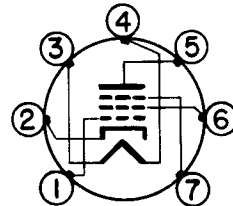


RMA 5-1

**TERMINAL CONNECTIONS**

- Pin 1 - Grid Number 1
- Pin 2 - Cathode and Internal Shield
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Plate
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Grid Number 3 (Suppressor)

**BASING DIAGRAM**



RMA 7CM  
BOTTOM VIEW

**DESIGN CENTER VALUES:**

Plate Voltage . . . . .	180	Volts
Screen Voltage . . . . .	140	Volts
Positive Suppressor Grid Voltage . . . . .	27	Volts
Plate Dissipation . . . . .	1.7	Watts
Screen Dissipation . . . . .	0.75	Watt
Total Cathode Current . . . . .	18	Milliamperes
Heater-Cathode Voltage . . . . .	90	Volts
Bulb Temperature . . . . .	120	°C

**MAXIMUM RATINGS**

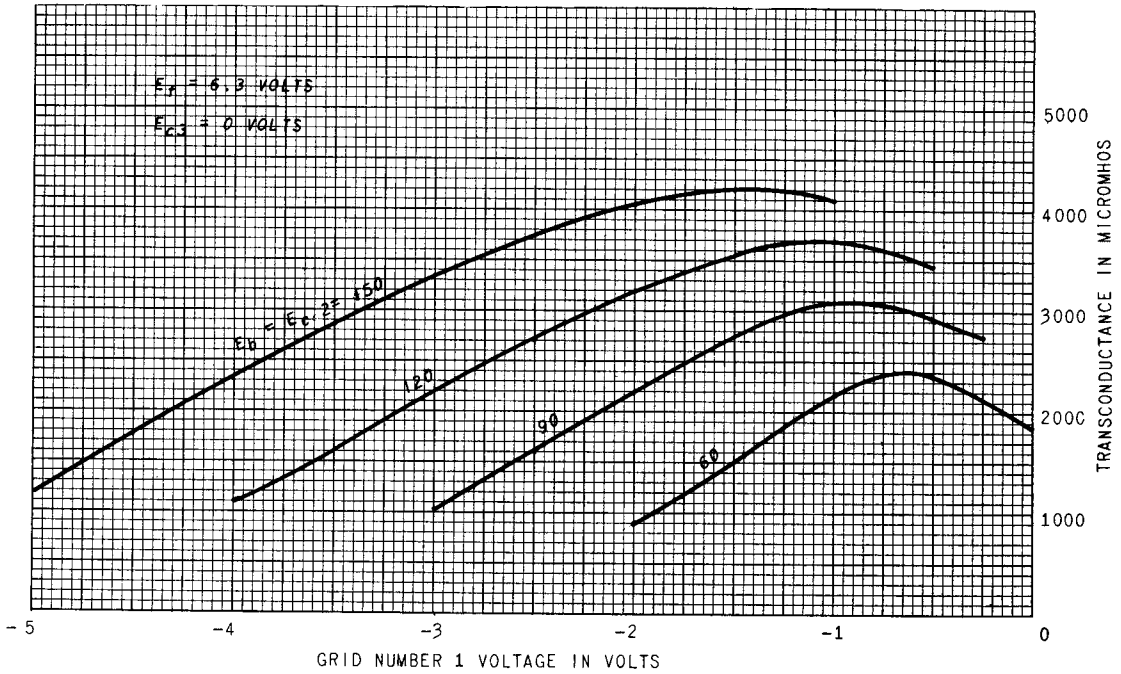
**CLASS A<sub>1</sub> AMPLIFIER**

**CHARACTERISTICS AND TYPICAL OPERATION**

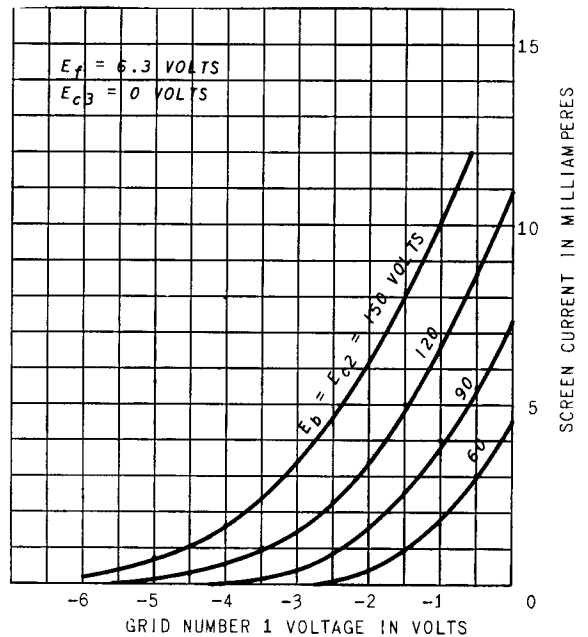
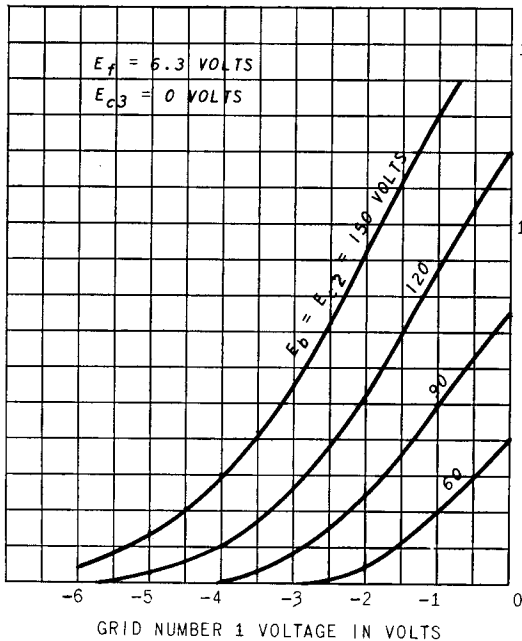
Plate Voltage . . . . .	120	120	Volts
Screen Voltage . . . . .	120	120	Volts
Suppressor Voltage . . . . .	-3	0	Volts
Grid Number 1 Bias Voltage . . . . .	-2	-2	Volts
Plate Current . . . . .	3.6	5.2	Milliamperes
Screen Current . . . . .	4.8	3.5	Milliamperes
Transconductance (Grid Number 1) . . . . .	1850	3200	Micromhos
Transconductance (Suppressor) . . . . .	810	470	Micromhos
Plate Resistance (Approx) . . . . .	---	0.11	Megohm
Grid Number 1 Voltage for I <sub>b</sub> = 10 Microamperes . . . . .	---	-7.5	Volts
Grid Number 3 Voltage for I <sub>b</sub> = 10 Microamperes . . . . .	-10	---	Volts

# With external shield connected to pin 2

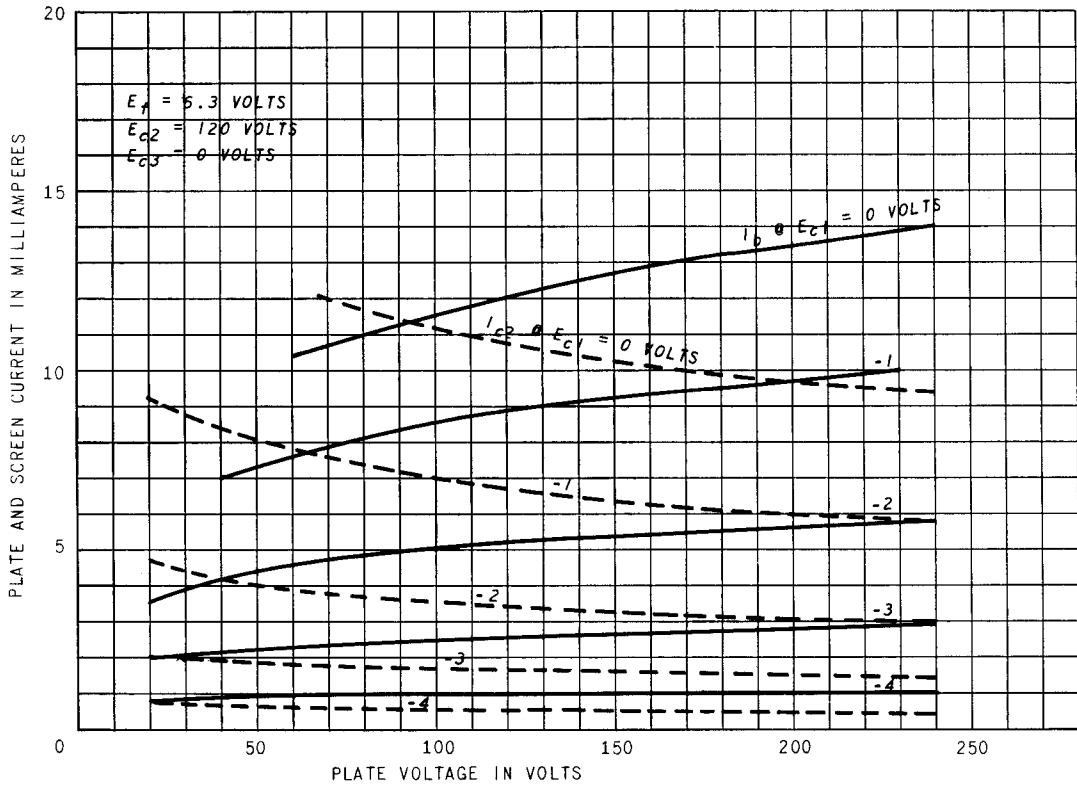
AVERAGE CHARACTERISTICS



AVERAGE CHARACTERISTICS



### AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS

