

6AS6

Description and Rating

RADIO-FREQUENCY-AMPLIFIER PENTODE

GENERAL DESCRIPTION

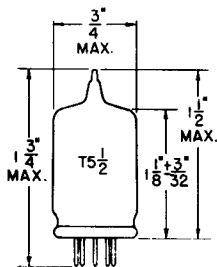
Principal Application: The 6AS6 is a miniature sharp-cut-off pentode whose control grid and suppressor grid can be used as independent control elements.

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 $\mu\mu\text{f}$
 Input (Grid 1 to All) 4.0 $\mu\mu\text{f}$
 Input (Grid 3 to All) 3.4 $\mu\mu\text{f}$
 Output 3.0 $\mu\mu\text{f}$
 Coupling (Grid 1 to Grid 3)(Max) 0.15 $\mu\mu\text{f}$

PHYSICAL DIMENSIONS

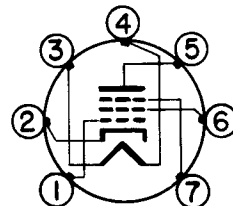


RMA 5-1

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

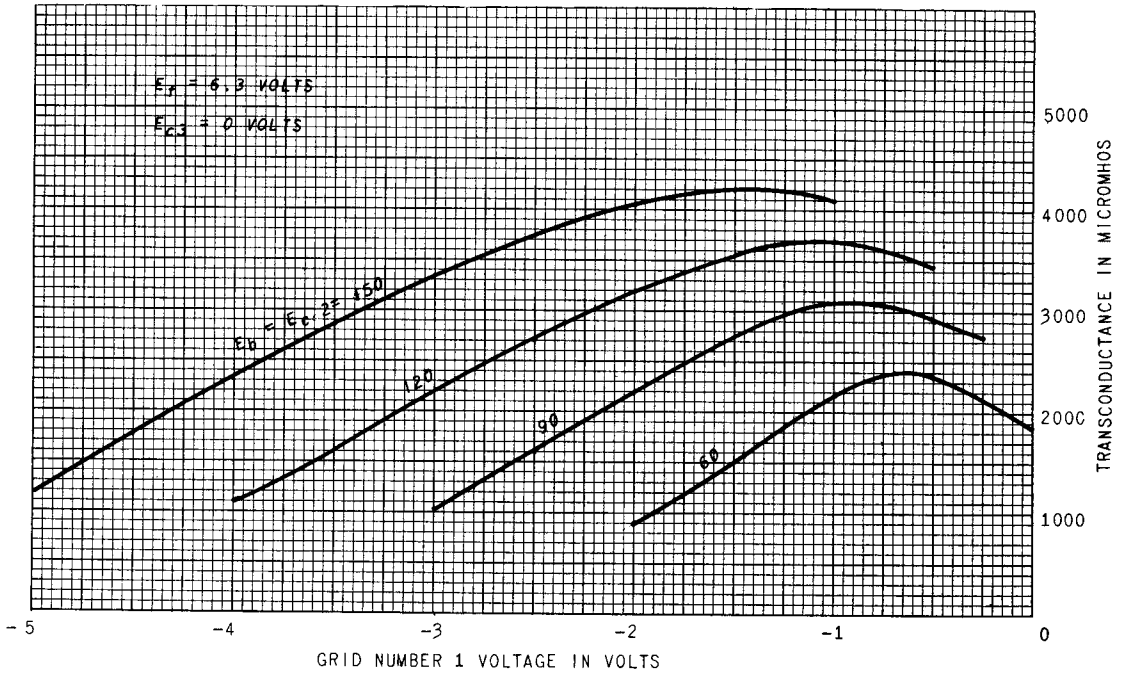
CLASS A₁ AMPLIFIER

CHARACTERISTICS AND TYPICAL OPERATION

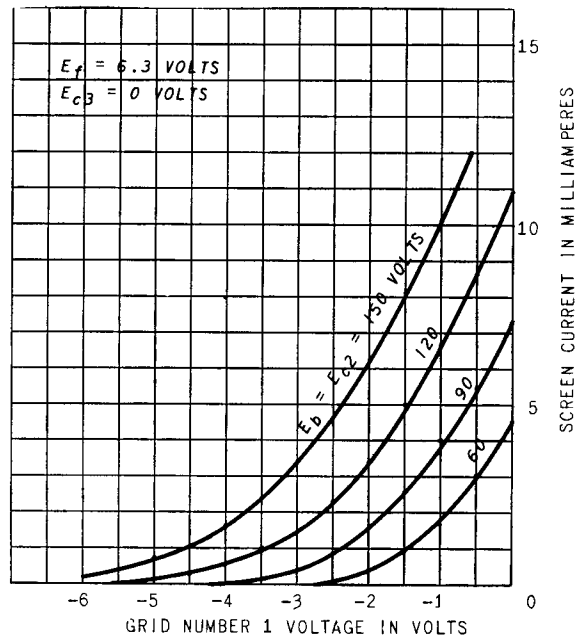
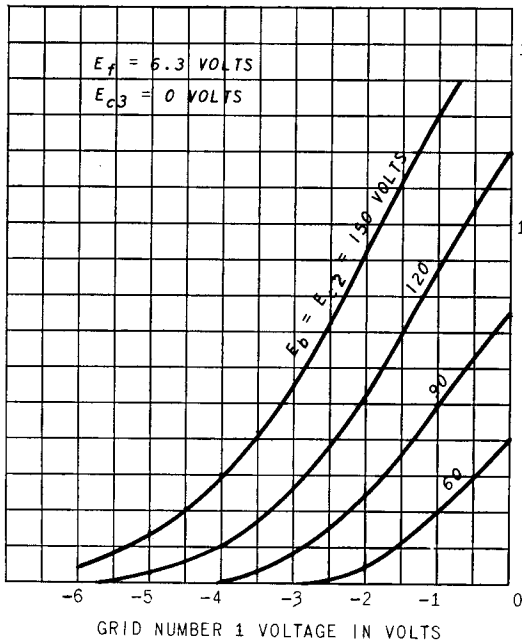
| | | | |
|---|------|------|--------------|
| Plate Voltage | 120 | 120 | Volts |
| Screen Voltage | 120 | 120 | Volts |
| Suppressor Voltage | -3 | 0 | Volts |
| Grid Number 1 Bias Voltage | -2 | -2 | Volts |
| Plate Current | 3.6 | 5.2 | Milliamperes |
| Screen Current | 4.8 | 3.5 | Milliamperes |
| Transconductance (Grid Number 1) | 1850 | 3200 | Micromhos |
| Transconductance (Suppressor) | 810 | 470 | Micromhos |
| Plate Resistance (Approx) | --- | 0.11 | Megohm |
| Grid Number 1 Voltage for $I_b = 10$ Microamperes | --- | -7.5 | Volts |
| Grid Number 3 Voltage for $I_b = 10$ Microamperes | -10 | --- | Volts |

With external shield connected to pin 2

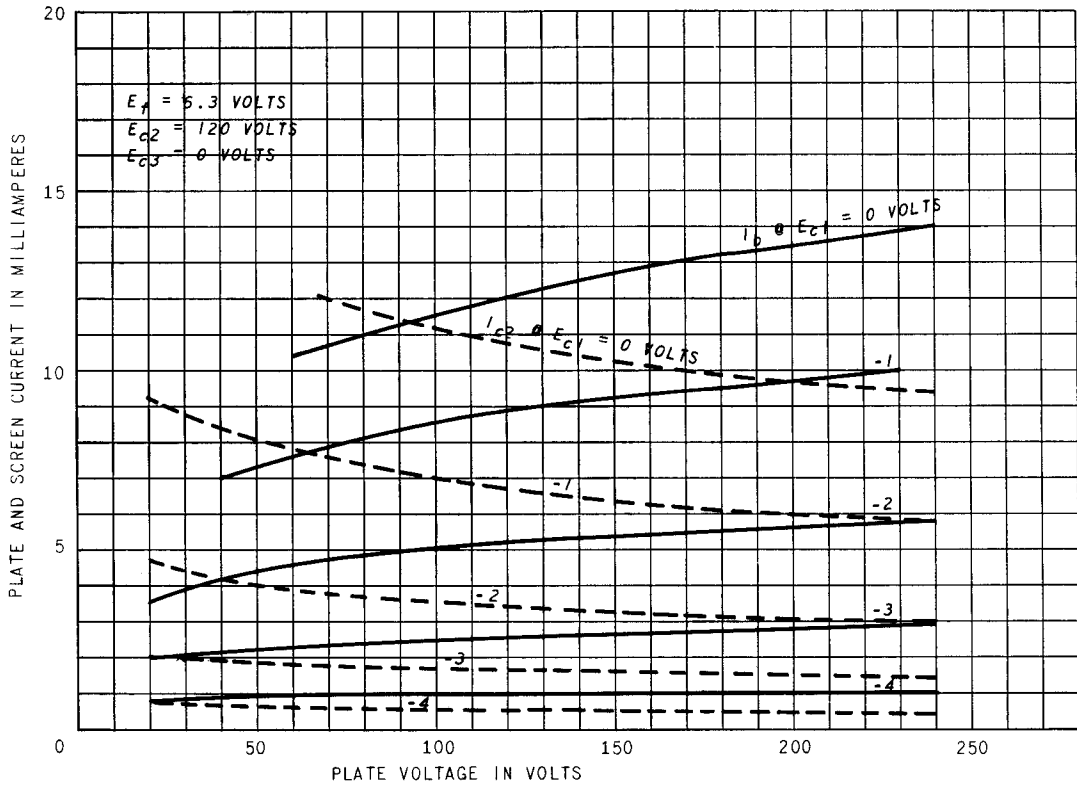
AVERAGE CHARACTERISTICS



AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS

