The 6AS7-GA is a low-mu twin triode designed primarily for service as a series regulator tube in d-c power supplies. Except for the use of a T-12 envelope, the 6AS7-GA is identical to the 6AS7-G.

**GENERAL**

**ELECTRICAL**

Cathode—Coated Unipotential
Heater Voltage, AC or DC ........................................... 6.3 Volts
Heater Current ............................................. 2.5 Amperes
Direct Interelectrode Capacitances, approximate*
  Grid to Plate, Each Section ................................ 7.5 μF
  Input, Each Section ........................................ 6.5 μF
  Output, Each Section ....................................... 2.2 μF
  Heater to Cathode, Each Section ...................... 7.0 μF
  Grid to Grid .................................................. 0.5 μF
  Plate to Plate .............................................. 1.9 μF

**MECHANICAL**

Mounting Position—Any
Envelope—T-12, Glass
Base—B8-110, Short Medium-Shell Octal 8-Pin

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**BASING DIAGRAM**

**TERMINAL CONNECTIONS**

Pin 1—Grid (Section 2)
Pin 2—Plate (Section 2)
Pin 3—Cathode (Section 2)
Pin 4—Grid (Section 1)
Pin 5—Plate (Section 1)
Pin 6—Cathode (Section 1)
Pin 7—Heater
Pin 8—Heater

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**PHYSICAL DIMENSIONS**
MAXIMUM RATINGS

DC AMPLIFIER SERVICE
DESIGN-CENTER VALUES, EACH SECTION

Plate Voltage ........................................... 250 Volts
Plate Dissipation ....................................... 13 Watts
Plate Current .......................................... 125 Milliamperes
Heater-Cathode Voltage
  Heater Positive with Respect to Cathode .................. 300 Volts
  Heater Negative with Respect to Cathode .................. 300 Volts
Grid-Circuit Resistance
  With Cathode-Bias† ................................... 1.0 Megohm

BOOSTER SCANNING SERVICE‡
DESIGN-CENTER VALUES, EACH SECTION

Peak Inverse Plate Voltage .............................. 1700 Volts
Plate Dissipation ....................................... 13 Watts
Plate Current .......................................... 125 Milliamperes
Heater-Cathode Voltage
  Heater Positive with Respect to Cathode .................. 300 Volts
  Heater Negative with Respect to Cathode .................. 300 Volts
Grid-Circuit Resistance
  With Cathode-Bias† ................................... 1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

AVERAGE CHARACTERISTICS, EACH SECTION

Plate Voltage .......................................... 135 Volts
Cathode-Bias Resistor .................................. 250 Ohms
Amplification Factor .................................... 2.0
Plate Resistance, approximate ......................... 280 Ohms
Transconductance ...................................... 7000 Micromhos
Plate Current .......................................... 125 Milliamperes

* Without external shield.
† Operation with fixed bias is not recommended.
‡ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.