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## 7AG7 SHARP-CUTOFF PENTODE

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . . 6.3<sup>□</sup> . . . . . ac or dc volts  
Current . . . . . 0.15<sup>□□</sup> . . . . . amp

Direct Interelectrode Capacitances:<sup>○</sup>

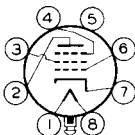
Grid No.1 to Plate . . . . . 0.005 max. . . . .  $\mu\text{f}$   
Input . . . . . 7 . . . . .  $\mu\text{f}$   
Output . . . . . 6 . . . . .  $\mu\text{f}$

<sup>○</sup> with external shield connected to cathode.

#### Mechanical:

Mounting Position . . . . . Any  
Maximum Overall Length . . . . . 2-25/32"  
Maximum Seated Length . . . . . 2-1/4"  
Maximum Diameter . . . . . 1-3/16"  
Bulb . . . . . T-9  
Base . . . . . Lock-in 8-Pin  
Basing Designation for BOTTOM VIEW . . . . . 8V

Pin 1-Heater  
Pin 2-Plate  
Pin 3-Grid No.2  
Pin 4-Grid No.3  
Pin 5-Internal  
Shield



Pin 6-Grid No.1  
Pin 7-Cathode  
Pin 8-Heater  
Plug - Base  
Shell

### AMPLIFIER - Class A<sub>1</sub>

#### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . . 300 max. volts  
GRID-No.2 (SCREEN) VOLTAGE . . . . . 300 max. volts  
PLATE DISSIPATION . . . . . 2 max. watts  
GRID-No.2 DISSIPATION . . . . . 0.75 max. watt  
GRID-No.1 (CONTROL-GRID) VOLTAGE:  
Negative bias value . . . . . 1 min. volt  
PEAK HEATER-CATHODE VOLTAGE:  
Heater negative with respect to cathode. 90 max. volts  
Heater positive with respect to cathode. 90 max. volts

<sup>□</sup> Nominal voltage = 7.0 volts.

<sup>□□</sup> Nominal current = 0.16 ampere.

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Typical Operation and Characteristics:

Plate Voltage. . . . .	250	. .	volts
Grid No.3 (Suppressor) . . . . .	Connected to cathode at socket		
Internal Shield. . . . .	Connected to cathode at socket		
Grid-No.2 Voltage. . . . .	250	. .	volts
Cathode-Bias Resistor* . . . . .	250	. .	ohms
Plate Resistance (Approx.) . . . . .	0.75	. .	megohm
Transconductance . . . . .	4200	. .	$\mu$ mhos
Grid-No.1 Bias (Approx.) for plate current of 10 $\mu$ a . . . . .	-10	. .	volts
Plate Current. . . . .	6	. .	ma
Grid-No.2 Current. . . . .	2	. .	ma

\* Fixed-bias operation is not recommended.