GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:
Voltage 6.3 a.c. or d.c. volts
Current 0.3 amp.

Direct Interelectrode Capacitances:
Grid No.1 to Plate 0.003 max. μF
Input 5.0 μF
Output 9.0 μF
Diode No.1 to Diode No.2 0.3 max. μF
Diode No.1 to Grid No.1 0.00045 max. μF
Diode No.2 to Grid No.1 0.00045 max. μF

Mechanical:

Mounting Position Any
Maximum Overall Length 3-3/8"
Maximum Seated Height 3-1/16"
Maximum Diameter 1-5/16"

Bulb T9
Cap Skirted miniature- Style C
Base Intermediate Shell Octal 8-Pin

PIN 1 - Heater
Pin 6 - Diode No.1
Pin 7 - Cathode,
Pin 8 - Heater
Cap - Grid No.1

Pin 2 - Base shield
and metal shell.

Pin 3 - Plate

Pin 4 - Grid No.2 (Screen)

Pin 5 - Diode No.2

PENTODE UNIT

Maximum Ratings; Design-Centre Values:

Plate Voltage 300 max. volts
Grid No.2 (Screen) Voltage 125 max. volts
Grid No.2 Supply Voltage 300 max. volts
Plate Dissipation 2.25 max. watts
Screen Dissipation 0.35 max. watts
Grid No.1 (Control-Grid) Voltage:
Negative Bias-Value 0 min. volts
Peak Heater-Cathode Voltage:
Heater negative with respect to cathode 90 max. volts
Heater positive with respect to cathode 90 max. volts
AMPLIFIER - Class A

Typical Operation and Characteristics:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>250</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>100</td>
</tr>
<tr>
<td>Grid No. 1 Voltage</td>
<td>-2</td>
</tr>
<tr>
<td>Mutual Conductance</td>
<td>2,500</td>
</tr>
<tr>
<td>Grid No. 1 Voltage (approx.) for Mutual Conductance = 20 (\mu)hols</td>
<td>-25</td>
</tr>
<tr>
<td>Plate Current</td>
<td>7.0</td>
</tr>
<tr>
<td>Grid No. 2 Current</td>
<td>1.8</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>1.0</td>
</tr>
</tbody>
</table>

\(\mu\)hols

DIODE UNIT

The two diode plates are placed around a cathode, the sleeve of which is common to the pentode unit. Each diode plate has its own base pin. The minimum diode current per plate with an applied d.c. voltage of 10 volts is 0.8 mA.

○ With base shield and metal shell earthed.
6AR7-GT

AVERAGE CHARACTERISTICS

$E_t = 6.3$ VOLTS
PLATE VOLTS $= 250$
SCREEN VOLTS $= 100$