DOUBLE TRIODE
MINIATURE TYPE
COATED UNIPOTENTIAL CATHODE
HEATER

SERIES
12.6 VOLTS
150 MA.

PARALLEL
6.3 VOLTS
300 MA.

AC OR DC

FOR 12.6 VOLT OPERATION APPLY HEATER
VOLTAGE BETWEEN PINS #4 AND #5, FOR
6.3 VOLT OPERATION APPLY HEATER VOL-
TAGE BETWEEN PIN #5 AND PINS #4 AND
#9 CONNECTED TOGETHER.

WHEN OPERATING FROM AN AC HEATER SUP-
PLY, DO NOT USE THE 12.6 VOLT CONNEC-
TION IF LOW-HUM CAPABILITIES ARE TO
BE REALIZED.

ANY MOUNTING POSITION

THE 12AY7 COMBINES TWO INDEPENDENT MEDIUM-MU INDIRECTLY HEATED CATHODE
TYPE TRIODES IN THE SMALL 9 PIN BUTTON MINIATURE CONSTRUCTION. IT IS IN-
TENDED FOR USE IN HIGH GAIN AUDIO AMPLIFIER SERVICE WHERE PARTICULAR
ATTENTION IS PAID TO MICROPHONICS, HUM, AND OTHER SOURCES OF INTERNAL
NOISE.

DIRECT INTERELECTRODE CAPACITANCES—APPROX.
WITH NO EXTERNAL SHIELD

GRID TO PLATE: (G TO P)
INPUT: G TO (H+K)
OUTPUT: P TO (H+K)

EACH UNIT
1.3 µuf
1.3 µuf
0.6 µuf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

EACH TRIODE UNIT

HEATER VOLTAGE
12.6
6.3
VOLTS

MAXIMUM DC HEATER—CATHODE VOLTAGE
90
VOLTS

MAXIMUM PLATE DISSIPATION
1.5
WATTS

MAXIMUM CATHODE CURRENT
10
MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
CLASS A AMPLIFIER

EACH TRIODE UNIT

HEATER VOLTAGE
12.6
6.3
VOLTS

HEATER CURRENT
150
300
MA.

PLATE VOLTAGE
250
VOLTS

GRID VOLTAGE
-4
VOLTS

PLATE CURRENT
3
MA.

TRANSCONDUCTANCE
1750
µMH/VE

AMPLIFICATION FACTOR
44

PLATE RESISTANCE (APPROX.)
25000
OHMS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL ELECTRIC INC. ELECTRON TUBE DIVISION BLOOMFIELD, NEW JERSEY, U.S.A. FEBRUARY 1, 1956 PLATE #4583
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

LOW LEVEL AMPLIFIER SERVICE

<table>
<thead>
<tr>
<th>EACH TRIODE SECTION</th>
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</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE^A</td>
</tr>
<tr>
<td>HEATER CURRENT</td>
</tr>
<tr>
<td>HEATER SUPPLY VOLTAGE</td>
</tr>
<tr>
<td>PLATE LOAD RESISTOR</td>
</tr>
<tr>
<td>CATHODE RESISTOR</td>
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<tr>
<td>CATHODE CAPACITOR</td>
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<tr>
<td>GRID RESISTOR</td>
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<tr>
<td>VOLTAGE GAIN</td>
</tr>
</tbody>
</table>

^A PIN NUMBER 9 CONNECTED TO NEGATIVE B SUPPLY.

INDICATES A CHANGE OR ADDITION