LOW-MU TWIN POWER TRIODE

GENERAL DATA

Heater, for Unipotential Cathodes:
Voltage .................................. 26.5 ± 10% .. ac or dc volts
Current .................................. 0.6 .. amp

Direct Interelectrode Capacitances (Approx.):
(Each Unit, without external shield)
Grid to Plate ................................ 8 .. μf
Input ...................................... 6 .. μf
Output .................................... 2.2 .. μf
Heater to Cathode:
Triode Unit No.1 .................. 13 .. μf
Triode Unit No.2 .................. 13 .. μf
Grid of Unit No.1 to Grid of Unit No.2 .... 0.5 .. μf
Plate of Unit No.1 to Plate of Unit No.2 .... 2 .. μf

Characteristics, Amplifier Class A₁ (Each Unit):
Plate-Supply Voltage .................. 135 volts
Cathode-Bias Resistor .................. 250 ohms
Amplification Factor .................. 2
Plate Resistance .................. 280 ohms
Transconductance .................. 7000 μmhos
Plate Current .................. 125 mA

Mechanical:
Mounting Position .................. Any
Maximum Overall Length ................ .. 4-1/16" ..
Maximum Seated Length ................ .. 3-1/2" ..
Maximum Diameter ................ .. 1-23/32" ..
Bulb .. Large-Wafer Octal 8-Pin with Sleeve and External Barriers (JETEC No. 86-98)
Base ................ Large-Wafer Octal 8-Pin with Sleeve and External Barriers (JETEC No. 86-98)

Basing Designation for BOTTOM VIEW ........... 8BD
Pin 1 – Grid of Unit No.2
Pin 2 – Plate of Unit No.2
Pin 3 – Cathode of Unit No.2
Pin 4 – Grid of Unit No.1
Pin 5 – Plate of Unit No.1
Pin 6 – Cathode of Unit No.1
Pin 7 – Heater
Pin 8 – Heater

DC AMPLIFIER

Values are for Each Unit

Maximum Ratings, Absolute Values:
PLATE VOLTAGE .................. 250 max. volts
PLATE CURRENT .................. 125 max. mA
PLATE DISSIPATION .................. 13 max. watts
PEAK HEATER–CATHODE VOLTAGE:
Heater negative with respect to cathode ........ 300 max. volts
Heater positive with respect to cathode ........ 300 max. volts

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LOW-MU TWIN POWER TRIODE

BULB TEMPERATURE* .......................... 200 max. °C

Maximum Circuit Values:
Grid–Circuit Resistance:
For cathode-bias operation ............. 1.0 max. megohm
For fixed-bias operation◊ ............. 0.1 max. megohm
For combined fixed- and
cathode-bias operation*A ............. 0.1 max. megohm

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

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<thead>
<tr>
<th>Note</th>
<th>Min.</th>
<th>Max.</th>
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<tr>
<td>Heater Current .................. 1</td>
<td>0.55</td>
<td>0.65</td>
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</table>
| Amplification Factor
  (Each Unit) .................. 1,2 | 1.4 | 2.6 | |
| Plate Current (Each Unit) ......... 1,2 | 100 | 150 | ma |
| Transconductance
  (Each Unit) .................. 1,2 | 5800 | 8200 | μmhos |
| Reverse Grid Current
  (Units in Parallel) .......... 1,3 | - | 4 | μamp |

Note 1: With 26.5 volts ac or dc on heater.
Note 2: With plate-supply voltage of 135 volts, and cathode-bias resistor
of 250 ohms in each cathode (both triode units operating).
Note 3: With plate-supply voltage of 135 volts, grid resistor of 1 megohm
in each grid and cathode-bias resistor of 250 ohms in each cathode
(both triode units operating).
◊ At hottest point on bulb surface.
* When fixed bias is used, the plate circuit should contain a protective
resistance to provide a minimum drop of 15 volts dc at the normal oper-
ating conditions.
A* When combined fixed- and cathode-bias is used, the cathode-bias portion
should have a minimum value of 7.5 volts dc at the normal operating con-
ditions.

SPECIAL RATINGS & PERFORMANCE DATA

Shock Rating:
Impact Acceleration ............. 450 max. g
Tubes are held rigid in four different positions in a Navy
Type, High Impact (flyweight) Shock Machine and are sub-
jected to 450 g impact acceleration.

Fatigue Rating:
Vibrational Acceleration ......... 2.5 max. g
Tubes are rigidly mounted and subjected in each of three
positions to 2.5 g vibrational acceleration at 25 cycles
per second for 32 hours.

Low-Frequency Vibration Performance:
RMS Output Voltage ............. 200 max. mv
Under the following conditions and with units connected
in parallel: Heater voltage of 26.5 volts, plate voltage

* indicates a change

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supply of 135 volts, dc grid voltage of –7 volts, plate load resistance of 2000 ohms, and vibrational acceleration of 2.5 g at 25 cycles per second.

Outline Drawing and Average Plate Characteristics Curve for the 6082 are the same as shown for Type 6080