



6082

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LOW-MU TWIN POWER TRIODE

GENERAL DATA

Heater, for Unipotential Cathodes:

Voltage 26.5 $\pm$ 10% ac or dc volts
 Current 0.6 amp

Direct Interelectrode Capacitances (Approx.):

(Each Unit, without external shield)

Grid to Plate 8 μ f
 Input 6 μ f
 Output 2.2 μ f

Heater to Cathode:

Triode Unit No.1 13 μ f
 Triode Unit No.2 13 μ f

Grid of Unit No.1 to Grid of Unit No.2 0.5 μ f

Plate of Unit No.1
 to Plate of Unit No.2 2 μ f

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 μ mhos
 Plate Current 125 ma

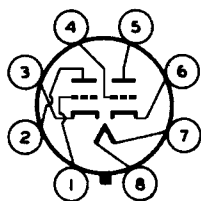
Mechanical:

Mounting Position Any
 Maximum Overall Length 4-1/16"
 Maximum Seated Length 3-1/2"
 Maximum Diameter 1-23/32"
 Bulb T-12
 Base Large-Wafer Octal 8-Pin with Sleeve and

External Barriers (JETEC No.88-98)

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 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

← Indicates a change

AUG. 1, 1953

TUBE DEPARTMENT

DATA 1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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[★] 0.1 max. megohm

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Note	Min.	Max.	
Heater Current	1	0.55	0.65	amp
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 operating conditions.

★ 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 conditions.

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 subjected 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