SHARP-CUTOFF PENTODE
7-PIN MINIATURE TYPE

DATA

Electrical:

Heater, for Unipotential Cathode:
Voltage: 6.3 ac or dc volts
Current: 0.3 amp

Direct Interelectrode Capacitances:
Grid No.1 to plate: 0.02 max. μf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater: 6.3 μf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater: 1.9 μf

Characteristics, Class A1 Amplifier:
Plate-Supply Voltage: 125 volts
Grid-No.3: Connected to cathode at socket
Grid-No.2-Supply Voltage: 125 volts
Cathode Resistor: 56 ohms
Plate Resistance (Approx.): 0.35 megohm
Transconductance: 9800 μmhos
Plate Current: 12 ma
Grid-No.2 Current: 3.8 ma
Grid-No.1 Voltage (Approx.) for plate μa = 20: -6.5 volts

Mechanical:
Operating Position: Any
Maximum Overall Length: 2-1/8"
Maximum Seated Length: 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip): 1-1/2" ± 3/32"
Diameter: 0.650" to 0.750"
Dimensional Outline: See General Section
Bulb: T5-1/2
Base: Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW: 7CM

Pin 1 — Grid No.1
Pin 2 — Cathode
Pin 3 — Heater
Pin 4 — Heater
Pin 5 — Plate

Pin 6 — Grid No.2
Pin 7 — Grid No.3, Internal Shield

AMPLIFIER — Class A1

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE: 330 max. volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE: 0 max. volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE: 330 max. volts

©: See next page.
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GRID-No.2 VOLTAGE: See Grid-No.2 Input Rating Chart at front of Receiving Tube Section
GRID-No.1 (CONTROL-GRID) VOLTAGE:
Positive-bias value: 0 max. volts
GRID-No.2 INPUT:
For grid-No.2 voltages up to 165 volts: 0.55 max. watt
For grid-No.2 voltages between 165 and 330 volts: See Grid-No.2 Input Rating Chart at front of Receiving Tube Section
PLATE DISSIPATION: 2.3 max. watts
PEAK HEATER-CATHODE VOLTAGE:
Heater negative with respect to cathode: 200 max. volts
Heater positive with respect to cathode: 200 max. volts

Maximum Circuit Values:
GRID-No.1-Circuit Resistance:
For fixed-bias operation: 0.25 max. megohm
For cathode-bias operation: 1 max. megohm

O Without external shield.
▲ The dc component must not exceed 100 volts.
E_f = 6.3 VOLTS
GRID NO. 3 CONNECTED TO CATHODE AT SOCKET.
GRID NO. 2 VOLTS = 125
AVERAGE CHARACTERISTICS

E \phi = 6.3\text{ VOLTS}

PLATE VOLTS = 125

GRID \#3 CONNECTED TO CATHODE AT SOCKET.

GRID-\#2 VOLTS = 125

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