SEMIREMOTE-CUTOFF PENTODE
MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
  Voltage ........ 6.3 ....... ac or dc volts
  Current ......... 0.3 ....... amp
Direct Interelectrode Capacitances (No external shield):
  Grid No.1 to plate ........ 0.02 max. ...... μf
  Input ........ 6.5 ...... μf
  Output ......... 2 ....... μf

Mechanical:
  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"
  Maximum Diameter ........ 3/4"
  Bulb ........ T-5-1/2
  Base ........ Small-Button Miniature 7-Pin (JETEC 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-Center Values:
  PLATE VOLTAGE ........ 300 max. volts
  GRID-No.3 (SUPPRESSOR) VOLTAGE ........ 0 max. volts
  GRID-No.2 SUPPLY VOLTAGE ........ 300 max. volts
  GRID-No.2 (SCREEN) VOLTAGE ........ See Rating Curve at
                                      front of this Section
  GRID-No.1 (CONTROL-GRID) VOLTAGE:
    Positive bias value ........ 0 max. volts
  PLATE DISSIPATION ........ 2 max. watts
  GRID-No.2 INPUT ........ 0.5 max. watt
  PEAK HEATER-CATHODE VOLTAGE:
    Heater negative with respect to cathode ........ 200 max. volts
    Heater positive with respect to cathode ........ 200 max. volts

Typical Operation and Characteristics:
  Plate Supply Voltage ........ 200 volts
  Grid No.3 ........ Connected to cathode at socket
  Grid-No.2 Voltage ........ 150 volts
  Cathode-Bias Resistor ........ 180 ohms
  Plate Resistance (Approx.) ........ 0.5 megohm

▲ The dc component must not exceed 100 volts.

JUNE 14, 1954
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
6DC6

SEMIREMOTE-CUTOFF PENTODE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transconductance</td>
<td>5500 μmhos</td>
</tr>
<tr>
<td>Grid-No.1 Voltage (Approx.) for transconductance of 50 μmhos</td>
<td>-12.5 volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>9 ma</td>
</tr>
<tr>
<td>Grid-No.2 Current</td>
<td>3 ma</td>
</tr>
</tbody>
</table>

Maximum Circuit Values (For maximum rated conditions):

<table>
<thead>
<tr>
<th>Circuit Resistance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid-No.1-Circuit Resistance:</td>
<td></td>
</tr>
<tr>
<td>For fixed-bias operation</td>
<td>0.25 max. megohm</td>
</tr>
<tr>
<td>For cathode-bias operation</td>
<td>1.0 max. megohm</td>
</tr>
</tbody>
</table>
AVERAGE PLATE CHARACTERISTICS

$E_C = 6.3$ VOLTS
GRID-N$^2$ VOLTS = 0
GRID-N$^2$ VOLTS = 150
AVERAGE CHARACTERISTICS

$E_F = 6.3$ VOLTS
PLATE VOLTS = 200
GRID-N°3 VOLTS = 0
$E_{C_2} = GRID-N°2$ VOLTS
$E_{CC_2} = GRID-N°2$-SUPPLY VOLTS

GRID-N°1 VOLTS

PLATE MILLIAMPERES

ECC VOLTS = 2.5V
THROUGH 3300 OHMS

ECC VOLTS = 150
125
100
75

ECC VOLTS = 75

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-8337
AVERAGE CHARACTERISTICS

- $E_f = 6.3$ VOLTS  PLATE VOLTS = 200
- GRID-N°3 VOLTS = 0
- $E_{c2} =$ GRID-N°2 VOLTS
- $E_{cc2} =$ GRID-N°2-SUPPLY VOLTS

JUNE 15, 1954
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
92CM-8338
AVERAGE CHARACTERISTICS

E_f = 6.3 VOLTS
PLATE VOLTS = 200
GRID-N\_3 VOLTS = 0
EC2 = GRID-N\_2 VOLTS
ECC2 = GRID-N\_2-SUPPLY VOLTS

GRID-N\_1 VOLTS

TRANSCONDUCTANCE - MICROHMS

JUNE 15, 1954
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HAUPPAUGE, NEW JERSEY