



26D6

PENTAGRID CONVERTER

MINIATURE TYPE

For use with 12-cell storage-battery supply

26D6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

| | | |
|-------------------|------|----------------|
| Voltage | 26.5 | ac or dc volts |
| Current | 0.07 | amp |

Direct Interelectrode Capacitances:

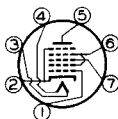
| | | |
|--|------------------|----|
| Grid #3 to All Other Electrodes (RF Input) | 7.5 [●] | μf |
| Plate to All Other Electrodes (Mixer Output) | 14 [●] | μf |
| Grid #1 to All Other Electrodes (Osc. Input) | 5.8 [●] | μf |
| Grid #3 to Plate | 0.30 max. | μf |
| Grid #1 to Grid #3 | 0.15 max. | μf |
| Grid #1 to Plate | 0.03 max. | μf |
| Grid #1 to External Shield and All Other Electrodes Except Cathode & Grid No.5 | 2.9 | μf |
| Grid #1 to Cathode & Grid #5 | 2.8 [▲] | μf |
| Cathode to External Shield and All Other Electrodes Except Grid #1 | 15.5 | μf |

Mechanical:

| | |
|---|------------------------|
| Mounting Position | Any |
| Maximum Overall Length | 2-1/8" |
| Maximum Seated Length | 1-7/8" |
| Length from Base Seat to Bulb Top (excluding tip) | 1-1/2" ± 3/32" |
| Maximum Diameter | 3/4" |
| Bulb | T-5-1/2 |
| Base | Miniature Button 7-Pin |

Basing Designation for BOTTOM VIEW

| | |
|----------------------------|------------------------------|
| Pin 1 - Grid No.1 | Pin 5 - Plate |
| Pin 2 - Cathode, Grid No.5 | Pin 6 - Grid No.2, Grid No.4 |
| Pin 3 - Heater | Pin 7 - Grid No.3 |
| Pin 4 - Heater | |



CONVERTER

Maximum Ratings, Design-Center Values:

| | |
|--|----------------|
| PLATE VOLTAGE | 300 max. volts |
| GRIDS-No.2 & No.4 (SCREEN) VOLTAGE | 100 max. volts |
| GRIDS-No.2 & No.4 SUPPLY VOLTAGE | 300 max. volts |
| PLATE DISSIPATION | 1.0 max. watt |
| GRIDS-No.2 & No.4 DISSIPATION | 1.0 max. watt |
| TOTAL CATHODE CURRENT | 14 max. ma. |
| GRID-No.3 (CONTROL GRID) VOLTAGE: | |
| Negative bias value | 50 max. volts |
| Positive bias value | 0 max. volts |
| PEAK HEATER-CATHODE VOLTAGE: | |
| Heater negative with respect to cathode | 90 max. volts |
| Heater positive with respect to cathode | 90 max. volts |

● with external shield connected to cathode.
▲ with external shield connected to other electrodes.

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PENTAGRID CONVERTER

Characteristics - Separate Excitation:[□]

| | | | | |
|--|-------|-------|-------|--------|
| Plate Voltage. | 26.5 | 100 | 250 | volts |
| Grids-No.2 & No.4 Voltage. . | 26.5 | 100 | 100 | volts |
| Grid-No.3 Voltage. | -0.5 | -1.5 | -1.5 | volts |
| Grid-No.1 (Oscillator- Grid) Resistor | 20000 | 20000 | 20000 | ohms |
| Plate Resistance (Approx.) . | - | 0.5 | 1.0 | megohm |
| Conversion Transconductance | 270 | 455 | 475 | μmhos |
| Conversion Transconductance (Approx.)* | - | 4 | 4 | μmhos |
| Conversion Transconductance (Approx.)** | 8 | - | - | μmhos |
| Plate Current. | 0.45 | 2.8 | 3.0 | ma. |
| Grids-No.2 & No.4 Current. . | 1.6 | 8.0 | 7.8 | ma. |
| Grid-No.1 Current. | 0.1 | 0.5 | 0.5 | ma. |
| Total Cathode Current. . . . | 2.15 | 11.3 | 11.3 | ma. |

Characteristics of Oscillator Section:[▲]

| | | | |
|----------------------------------|------|------|-------|
| Plate Voltage. | 26.5 | 100 | volts |
| Grids-No.2 & No.4 Voltage. . . . | 26.5 | 100 | volts |
| Grid-No.3 Voltage. | 0 | 0 | volts |
| Grid-No.1 Voltage. | 0 | 0 | volts |
| Amplification Factor | - | 22 | |
| Transconductance | 4500 | 7200 | μmhos |
| Plate Current. | 5.5 | 27 | ma. |

[□] The characteristics shown with separate excitation correspond very closely with those obtained in a self-excited oscillator circuit operating with zero bias.

* With grid-No.3 bias of -30 volts.

** With grid-No.3 bias of -6 volts.

[▲] Measured between grid No.1 and grids-No.2 and No.4 connected to plate (not oscillating).

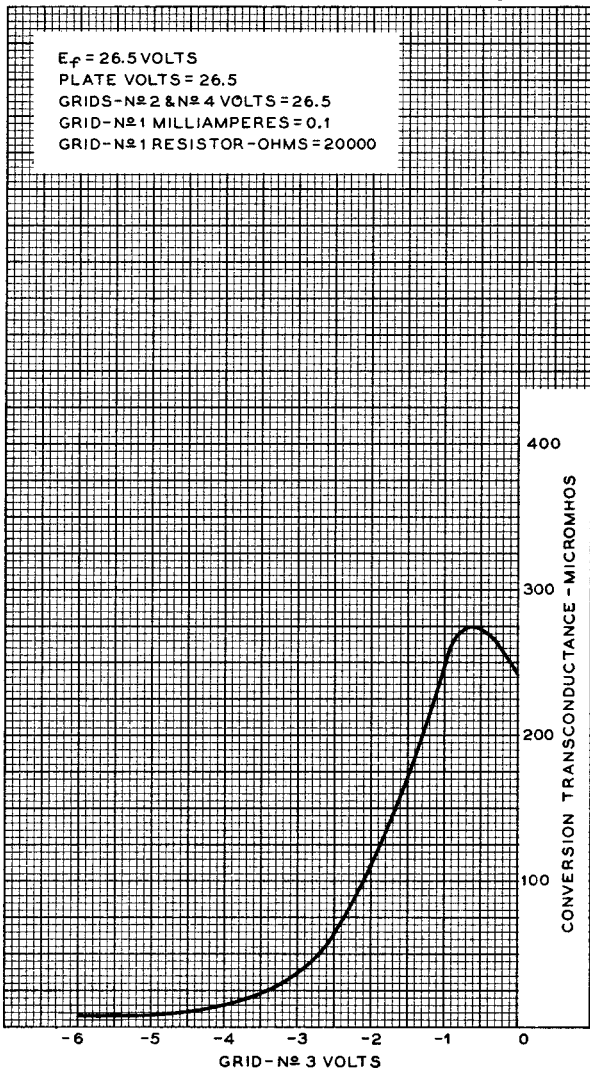
*The curves under Type 6BE6
also apply to the 26D6*



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26D6 OPERATION CHARACTERISTICS WITH SEPARATE OSCILLATOR EXCITATION

$E_p = 26.5$ VOLTS
PLATE VOLTS = 26.5
GRIDS-N^o 2 & N^o 4 VOLTS = 26.5
GRID-N^o 1 MILLIAMPERES = 0.1
GRID-N^o 1 RESISTOR - OHMS = 20000



JULY 31, 1946

TUBE DEPARTMENT

92C M - 6789

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

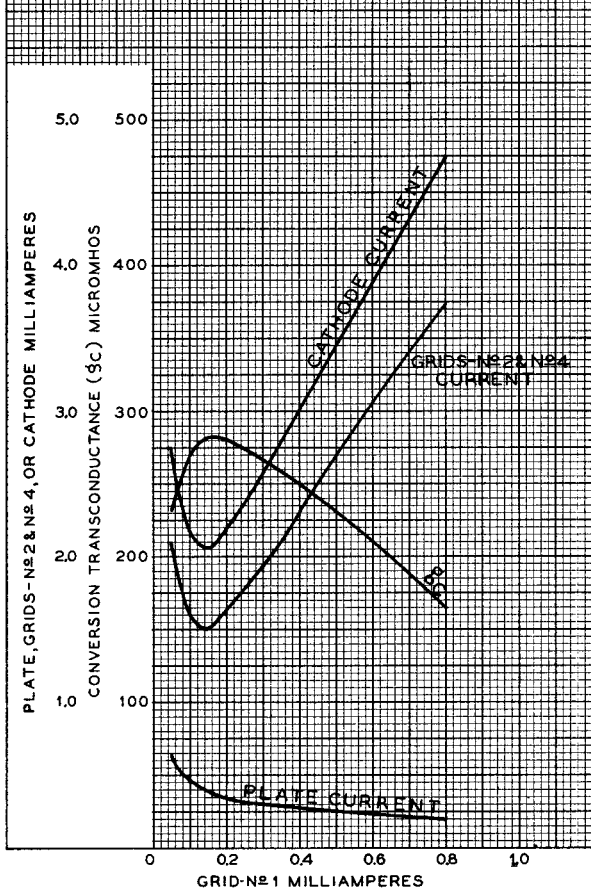
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OPERATION CHARACTERISTICS WITH SEPARATE OSCILLATOR EXCITATION

$E_f = 26.5$ VOLTS
 PLATE VOLTS = 26.5
 GRIDS - N^o 2 & N^o 4 VOLTS = 26.5
 GRID - N^o 1 RESISTOR - OHMS = 20000
 GRID - N^o 3 VOLTS = -0.5



AUGUST 1, 1948

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