

# 6DZ4

## Medium-Mu Triode

### 7-PIN MINIATURE TYPE

For UHF-Oscillator Service in TV Receivers

#### GENERAL DATA

##### Electrical:

###### Heater Characteristics and Ratings:

|                                                   |                 |            |
|---------------------------------------------------|-----------------|------------|
| Voltage (AC or DC) . . . . .                      | 6.3 ± 0.6       | volts      |
| Current at heater volts = 6.3 . . . . .           | 0.225           | amp        |
| Peak heater-cathode voltage:                      |                 |            |
| Heater negative with respect to cathode . . . . . | 50              | max. volts |
| Heater positive with respect to cathode . . . . . | 50 <sup>a</sup> | max. volts |

###### Direct Interelectrode Capacitances (Approx):<sup>b</sup>

|                                       |     |    |
|---------------------------------------|-----|----|
| Grid to plate . . . . .               | 1.8 | pf |
| Grid to cathode and heater . . . . .  | 2.2 | pf |
| Plate to cathode and heater . . . . . | 1.3 | pf |

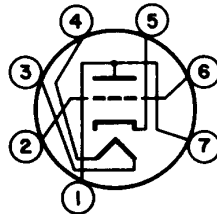
##### Characteristics, Class A<sub>1</sub> Amplifier:

|                                                   |      |       |
|---------------------------------------------------|------|-------|
| Plate Supply Voltage . . . . .                    | 80   | volts |
| Plate Resistor . . . . .                          | 2700 | ohms  |
| Amplification Factor . . . . .                    | 14   |       |
| Plate Resistance (Approx) . . . . .               | 2000 | ohms  |
| Transconductance . . . . .                        | 6700 | μmhos |
| Plate Current . . . . .                           | 15   | ma    |
| Grid Voltage (Approx) for plate μa = 20 . . . . . | -11  | volts |

##### Mechanical:

|                                                         |                                              |
|---------------------------------------------------------|----------------------------------------------|
| Operating Position . . . . .                            | Any                                          |
| Type of Cathode . . . . .                               | Coated Unipotential                          |
| Maximum Overall Length . . . . .                        | 1-3/4"                                       |
| Maximum Seated Length . . . . .                         | 1-1/2"                                       |
| Length, Base Seat to Bulb Top (Excluding tip) . . . . . | 1-1/8" ± 3/32"                               |
| Diameter . . . . .                                      | 0.650" to 0.750"                             |
| Dimensional Outline . . . . .                           | See <i>General Section</i>                   |
| Bulb . . . . .                                          | T5-1/2                                       |
| Base . . . . .                                          | Small-Button Miniature 7-Pin (JEDEC No.E7-1) |
| Basing Designation for BOTTOM VIEW . . . . .            | 7DK                                          |

Pin 1-Plate  
Pin 2-Grid  
Pin 3-Heater  
Pin 4-Heater



Pin 5-Cathode  
Pin 6-Grid  
Pin 7-Plate



RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA 1  
4-63

# 6DZ4

## UHF OSCILLATOR

### Maximum Ratings, Design-Maximum Values:

|                               |          |       |
|-------------------------------|----------|-------|
| PLATE VOLTAGE . . . . .       | 135 max. | volts |
| GRID VOLTAGE:                 |          |       |
| Negative-bias value . . . . . | 50 max.  | volts |
| GRID CURRENT . . . . .        | 2 max.   | ma    |
| CATHODE CURRENT . . . . .     | 20 max.  | ma    |
| PLATE DISSIPATION . . . . .   | 2.3 max. | watts |

### Typical Operation:<sup>c</sup>

*At frequency of 1000 Mc*

|                                    |       |         |
|------------------------------------|-------|---------|
| Plate Supply Voltage . . . . .     | 135   | volts   |
| Plate-Circuit Resistance . . . . . | 2700  | ohms    |
| Grid Resistor . . . . .            | 10000 | ohms    |
| Plate Current . . . . .            | 15.5  | ma      |
| Grid Current (Approx) . . . . .    | 800   | $\mu$ a |

### Maximum Circuit Values:

Grid-Circuit Resistance:

|                                      |                 |
|--------------------------------------|-----------------|
| For fixed-bias operation . . . . .   | Not recommended |
| For cathode-bias operation . . . . . | 0.5 max. megohm |

<sup>a</sup> The dc component must not exceed 25 volts.

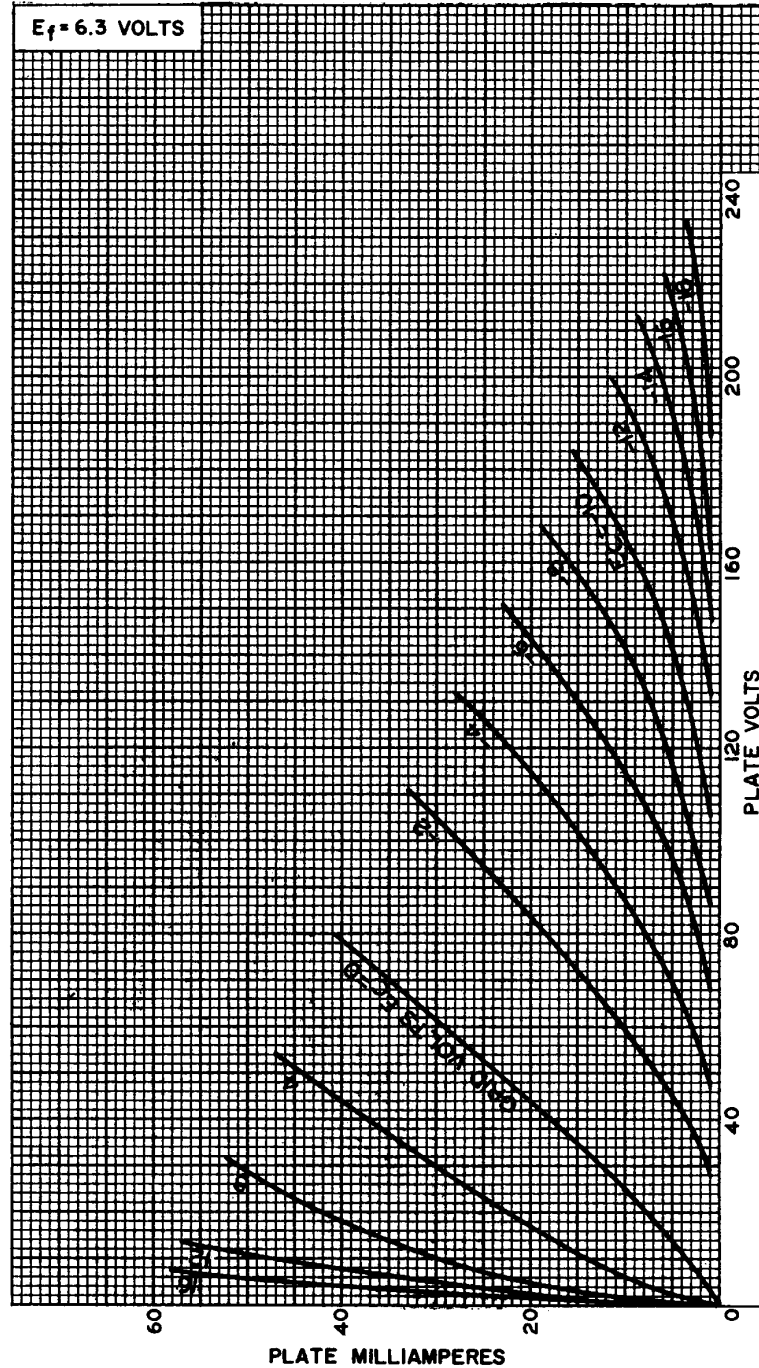
<sup>b</sup> With external shield JEDEC No.316 connected to cathode.

<sup>c</sup> Measured in JEDEC STANDARD OSCILLATION TEST SET No.400 with external, added resistance in plate circuit.



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## AVERAGE PLATE CHARACTERISTICS



92CM-7756

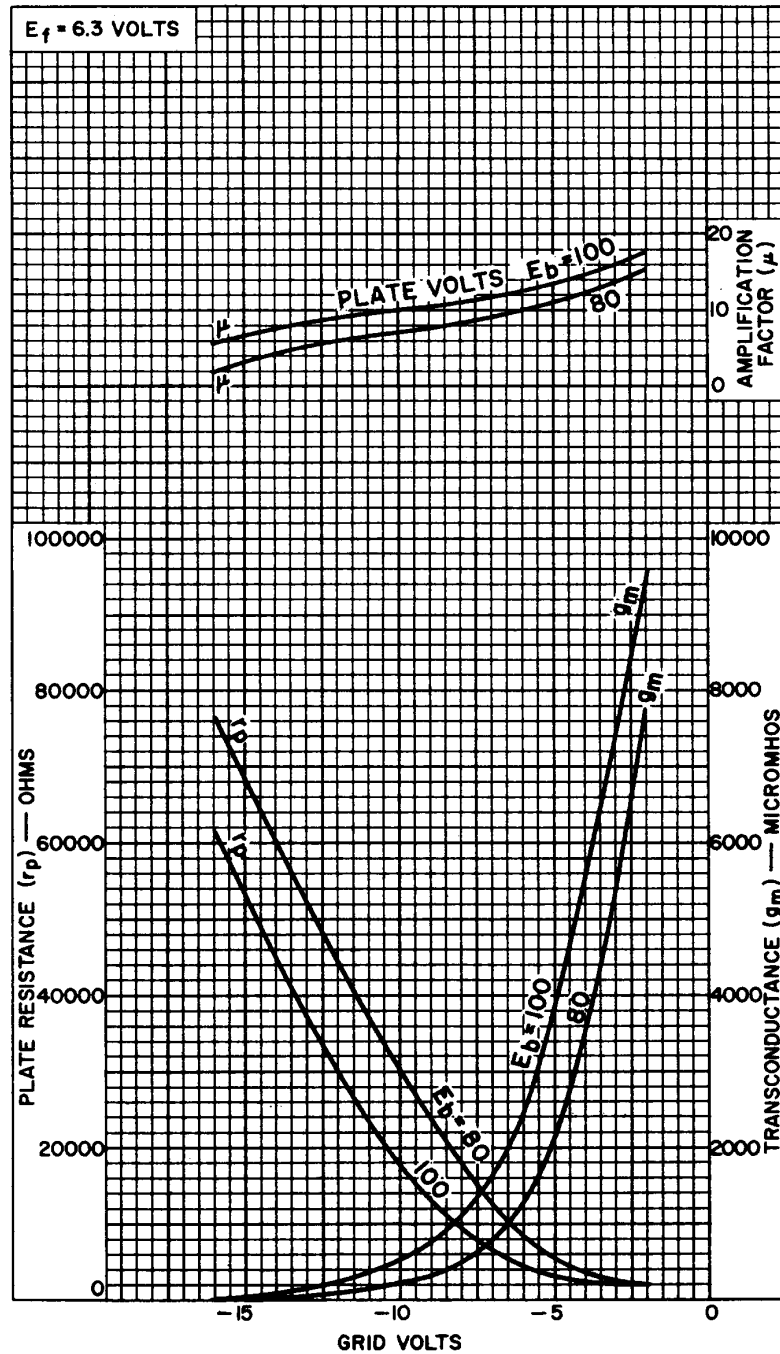


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## AVERAGE CHARACTERISTICS



92CM - 7758R1

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