

## 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  $\pm$  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. voltsDirect 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  $\mu$ hos

Plate Current . . . . . 15 ma

Grid Voltage (Approx) for plate  $\mu$ a = 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"  $\pm$  3/32"

Diameter. . . . . 0.650" to 0.750"

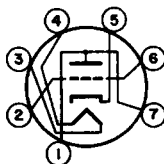
Dimensional Outline . . . . . See *General Section*

Bulb. . . . . T5-1/2

Base. . . . . Small-Button Miniature 7-Pin (JEDEC No.E7-1)

Basing Designation for BOTTOM VIEW. . . . . 7DK

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



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



# 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 |

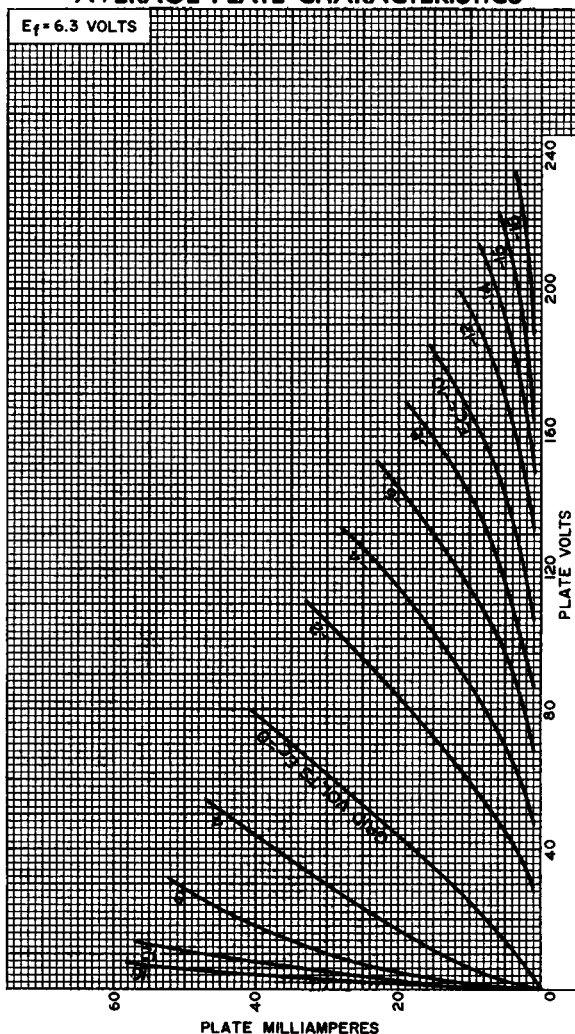
<sup>a</sup> The dc component must not exceed 25 volts.

<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.

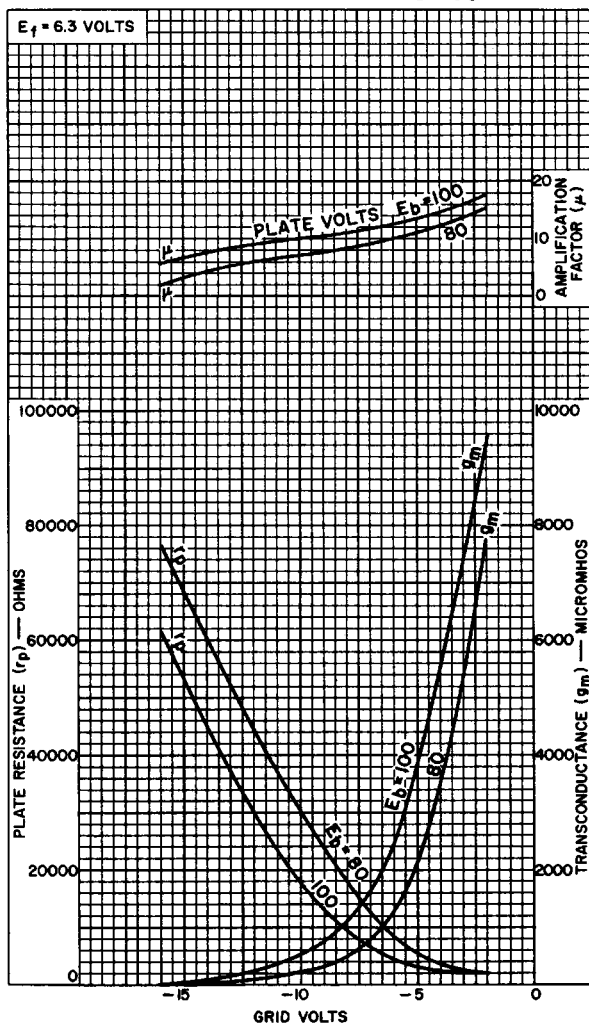


## AVERAGE PLATE CHARACTERISTICS



# 6DZ4

## AVERAGE CHARACTERISTICS



92CM - 7758R1

