

## 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. 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

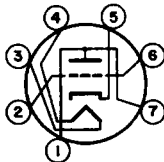
Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage . . . . . 80 volts  
 Plate Resistor . . . . . 2700 ohms  
 Amplification Factor . . . . . 14  
 Plate Resistance (Approx) . . . . . 2000 ohms  
 Transconductance . . . . . 6700  $\mu$ mhos  
 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

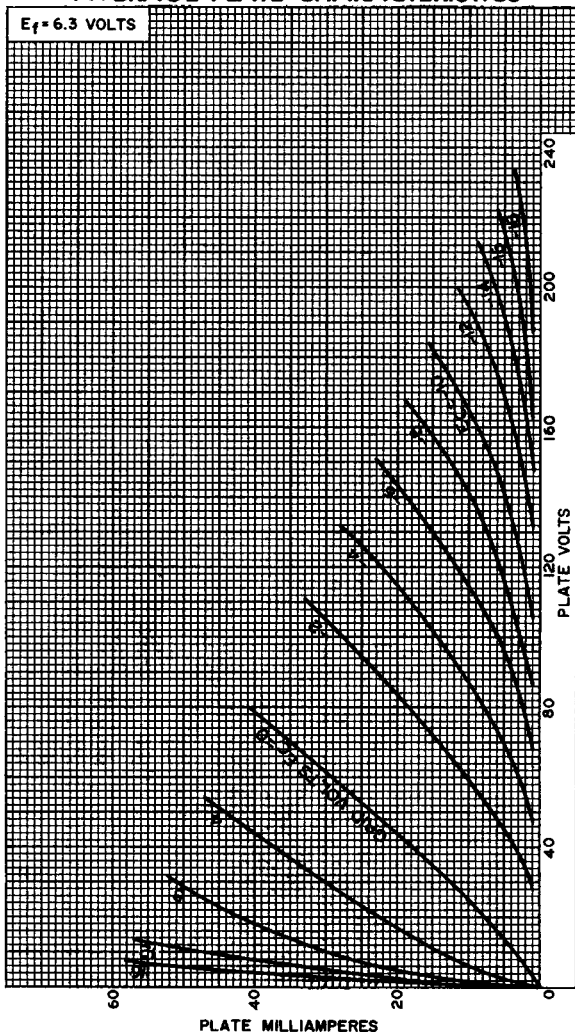
<sup>a</sup> The dc component must not exceed 25 volts.

<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

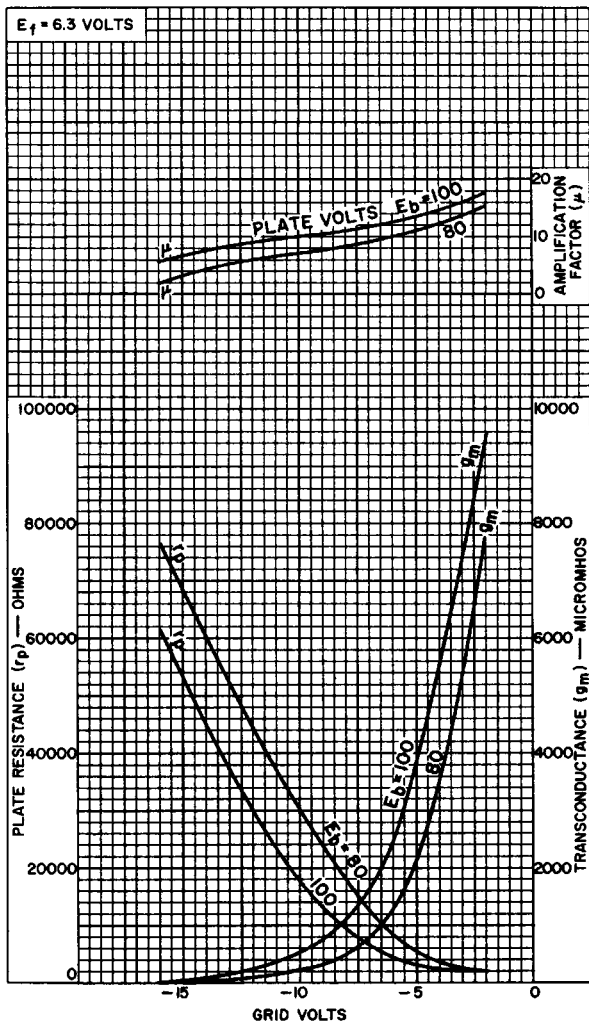


92CM-7756



# 6DZ4

## AVERAGE CHARACTERISTICS



92CM - 7758R1

