



6AN4

# HIGH-MU TRIODE

7-PIN MINIATURE TYPE  
For UHF TV service

6AN4

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . .	6.3	. . . . .	ac or dc volts
Current . . . . .	0.225	. . . . .	amp

Direct Interelectrode Capacitances (Approx.):

	Without External Shield	With External Shield <sup>o</sup>	
Grid to plate . . . . .	1.7	1.7	$\mu\text{f}$
Grid to cathode and heater. . .	2.9	3.3	$\mu\text{f}$
Plate to cathode and heater . .	0.25	1.8	$\mu\text{f}$
Heater to cathode . . . . .	3	2.9 <sup>•</sup>	$\mu\text{f}$
Grid to cathode . . . . .	2.6	2.6 <sup>•</sup>	$\mu\text{f}$
Plate to cathode. . . . .	0.2	0.18 <sup>•</sup>	$\mu\text{f}$
Cathode to grid and heater. . .	5.5	5.7 <sup>♦</sup>	$\mu\text{f}$
Plate to grid and heater. . . .	1.8	3.4 <sup>♦</sup>	$\mu\text{f}$

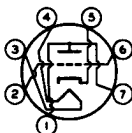
### Characteristics, Class A<sub>1</sub> Amplifier:

Plate-Supply Voltage. . . . .	200	volts
Cathode Resistor. . . . .	100	ohms
Amplification Factor. . . . .	70	
Transconductance. . . . .	10000	$\mu\text{mhos}$
Plate Current . . . . .	13	ma
Grid Voltage (Approx.) for plate current of 20 $\mu\text{a}$ . . . . .	-7	volts

### Mechanical:

Mounting Position . . . . .	Any
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"
Maximum Diameter. . . . .	3/4"
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

<sup>o</sup> With external shield JEDEC No. 316 connected to cathode except as noted.  
<sup>•</sup> With external shield JEDEC No. 316 connected to ground.  
<sup>♦</sup> With external shield JEDEC No. 316 connected to grid.

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AMPLIFIER - Class A<sub>1</sub>

## Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	300	max.	volts
CATHODE CURRENT . . . . .	30	max.	ma
PLATE DISSIPATION . . . . .	4	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	200	max.	volts
Heater positive with respect to cathode.	200 <sup>▲</sup>	max.	volts

## Maximum Circuit Values:

## Grid-Circuit Resistance:

For fixed-bias operation. . . . .	0.1	max.	megohm
For cathode-bias operation. . . . .	0.5	max.	megohm

▲ The dc component must not exceed 100 volts.