

# 6FQ5A

## High-Mu Triode

### 7-PIN MINIATURE TYPE

#### GENERAL DATA

#### Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC) . . . . .  $6.3 \pm 0.6$  volts

Current at heater volts = 6.3 . . . . . 0.180 amp

Peak heater-cathode voltage:

Heater negative with respect to cathode . . . . . 100 max. volts

Heater positive with respect to cathode . . . . . 100 max. volts

Direct Interelectrode Capacitances (Approx.):<sup>a</sup>

Grid to plate . . . . . 0.52  $\mu\mu\text{f}$

Grid to cathode, internal shield, and heater. . . . . 5.0  $\mu\mu\text{f}$

Plate to cathode, internal shield, and heater. . . . . 3.5  $\mu\mu\text{f}$

Heater to cathode . . . . . 2.5<sup>b</sup>  $\mu\mu\text{f}$

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

Plate Voltage . . . . . 135 volts

Grid Voltage . . . . . -1.2 volts

Amplification Factor . . . . . 74

Plate Resistance (Approx.) . . . . . 6300 ohms

Transconductance . . . . . 12000  $\mu\text{mhos}$

Plate Current . . . . . 8.9 ma

Grid Voltage (Approx.) for plate  $\mu\text{a} = 100$  . . . . . -4.5 volts

#### Mechanical:

Operating Position . . . . . Any

Type of Cathode . . . . . Coated Unipotential

Maximum Overall Length . . . . . 2-1/8"

Maximum Seated Length . . . . . 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip) . . . . . 1-1/2"  $\pm$  3/32"

Diameter . . . . . 0.650" to 0.750"

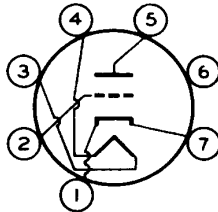
Dimensional Outline . . . . . See *General Section*

Bulb . . . . . T5-1/2

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

Basing Designation for BOTTOM VIEW . . . . . 7FP

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



Pin 5 - Plate  
Pin 6 - Internal Shield  
Pin 7 - Cathode



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## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . .	200 max.	volts
GRID VOLTAGE:		
Negative-bias value. . . . .	50 max.	volts
CATHODE CURRENT. . . . .	22 max.	ma
PLATE DISSIPATION. . . . .	2.5 max.	watts

### Maximum Circuit Values:

Grid-Circuit Resistance:		
For cathode-bias operation . . . . .	1 max.	megohm

<sup>a</sup> with external shield JEDEC No.316 connected to cathode except as noted.

<sup>b</sup> with external shield JEDEC No.316 connected to ground.

### CURVES

shown under Type 6GK5 also apply to the 6FQ5A

