

# 18FY6A

## Twin Diode—High-Mu Triode

7-PIN MINIATURE TYPE  
With Heater Having Controlled Warm-Up Time

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:  
Voltage (AC or DC) . . . . . 18 volts  
Current . . . . .  $0.1 \pm 6\%$  amp  
Warm-up time (Average) . . . . . 20 sec  
Direct Interelectrode Capacitances:

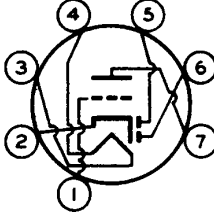
	<i>Without External Shield</i>	<i>With External Shield<sup>a</sup></i>	
Triode grid to triode plate . . . . .	1.8	1.8	$\mu\mu\text{f}$
Triode grid to cathode and heater. . . . .	2.4	2.4	$\mu\mu\text{f}$
Triode plate to cathode and heater. . . . .	0.22	2	$\mu\mu\text{f}$
Plate of diode unit No.2 to triode grid. . . . .	0.2 max.	0.2 max.	$\mu\mu\text{f}$

#### Characteristics, Class A<sub>1</sub> Amplifier (Triode Unit):

Plate Voltage . . . . . 100 volts  
Grid Voltage . . . . . -1 volt  
Amplification Factor . . . . . 100  
Plate Resistance (Approx.) . . . . . 77000 ohms  
Transconductance . . . . . 1300  $\mu\text{mhos}$   
Plate Current . . . . . 0.6 ma

#### Mechanical:

Operating Position . . . . . Any  
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 . . . . . 7BT

Pin 1—Grid of Triode Unit		Pin 5—Plate of Diode Unit No.2
Pin 2—Cathode of Triode Unit and Diode Units No.1 and No.2		Pin 6—Plate of Diode Unit No.1
Pin 3—Heater		Pin 7—Plate of Triode Unit
Pin 4—Heater		



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## TRIODE UNIT — AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE . . . . .	150 max.	volts	—
GRID VOLTAGE:			
Positive-bias value . . . . .	0 max.	volts	
PLATE DISSIPATION . . . . .	0.5 max.	watt	
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with			
respect to cathode. . . . .	100 max.	volts	
Heater positive with			—
respect to cathode. . . . .	100 max.	volts	

## DIODE UNITS — Two

### Maximum Ratings, Design-Maximum Values:

*Values are for Each Unit*

PLATE CURRENT . . . . .	1 max.	ma	—
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### Characteristics, Instantaneous Test Condition:

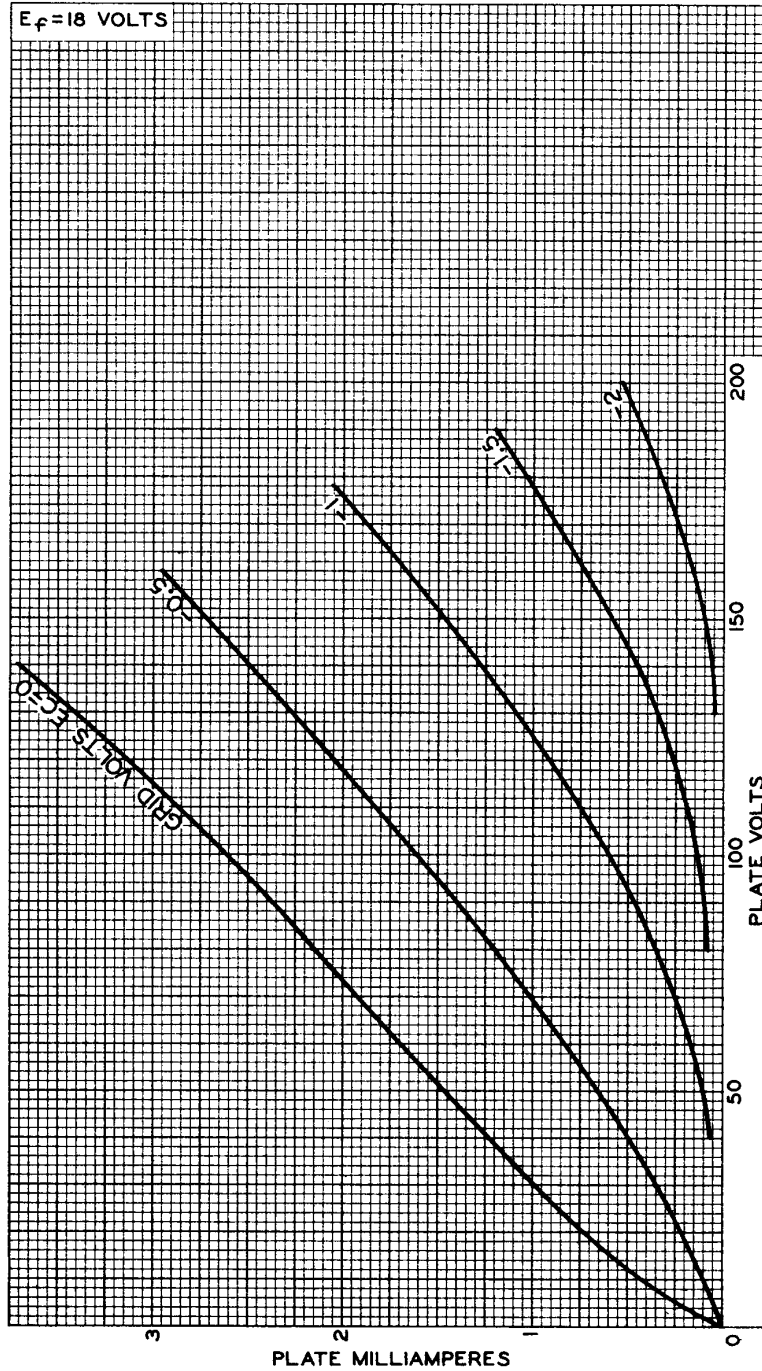
Plate Current for plate volts = 10. . . . .	2	ma	
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<sup>a</sup> With external shield JEDEC No.316 connected to cathode.



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## AVERAGE PLATE CHARACTERISTICS Triode Unit



92CM-10775



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

DATA 2  
7-61