



# 12SX7-GT

## TWIN-TRIODE AMPLIFIER

For use with 12-cell storage-battery supply

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:

Voltage. . . . . 12.6 . . . . . ac or dc volts

Current. . . . . 0.3 . . . . . amp

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

	<u>Triode Unit No. 1</u>	<u>Triode Unit No. 2</u>
Grid to Plate. . . . .	3.6	3.6
Grid to Cathode. . . . .	3.0	2.8
Plate to Cathode . . . . .	0.8	1.2

#### Mechanical:

Mounting Position. . . . . Any

Maximum Overall Length . . . . . 3-5/16"

Maximum Seated Length. . . . . 2-3/4"

Maximum Diameter . . . . . 1-5/16"

Bulb . . . . . T-9

Base . . . . . Intermediate Shell Octal 8-Pin

Basing Designation for BOTTOM VIEW . . . . . 8BD

Pin 1-Grid of

Unit No.2

Pin 2-Plate of

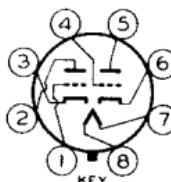
Unit No.2

Pin 3-Cathode of

Unit No.2

Pin 4-Grid of

Unit No.1



Pin 5-Plate of  
Unit No.1  
Pin 6-Cathode of  
Unit No.1  
Pin 7-Heater  
Pin 8-Heater

### CLASS A<sub>1</sub> AMPLIFIER

Values are for each unit

#### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. . . . . 300 max. volts

GRID VOLTAGE:

Negative bias value. . . . . 50 max. volts

Positive bias value. . . . . 0 max. volts

CATHODE CURRENT. . . . . 20 max. ma.

PLATE DISSIPATION. . . . . 2.5 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode 90 max. volts

Heater positive with respect to cathode 90 max. volts

#### Typical Operation and Characteristics:

Plate Voltage. . . . .	26.5	90	250	volts
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Grid Voltage:

From a fixed supply of	-	0	-8	volts
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From a grid resistor of	0.05	-	-	megohm
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Amplification Factor . .	21	20	20	
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Plate Resistance . . . . .	11500	6700	7700	ohms
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<sup>o</sup> With no external shield.

12SX7GT



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## TWIN-TRIODE AMPLIFIER

Transconductance . . . . .	1800	3000	2600	$\mu$ hos
Plate Current. . . . .	1.8	10	9.0	ma.

**Maximum Circuit Values (for maximum rated conditions):**

Grid-Circuit Resistance per unit. . . . . 1.0 max. megohm

**Typical Operation with Resistance Coupling:**

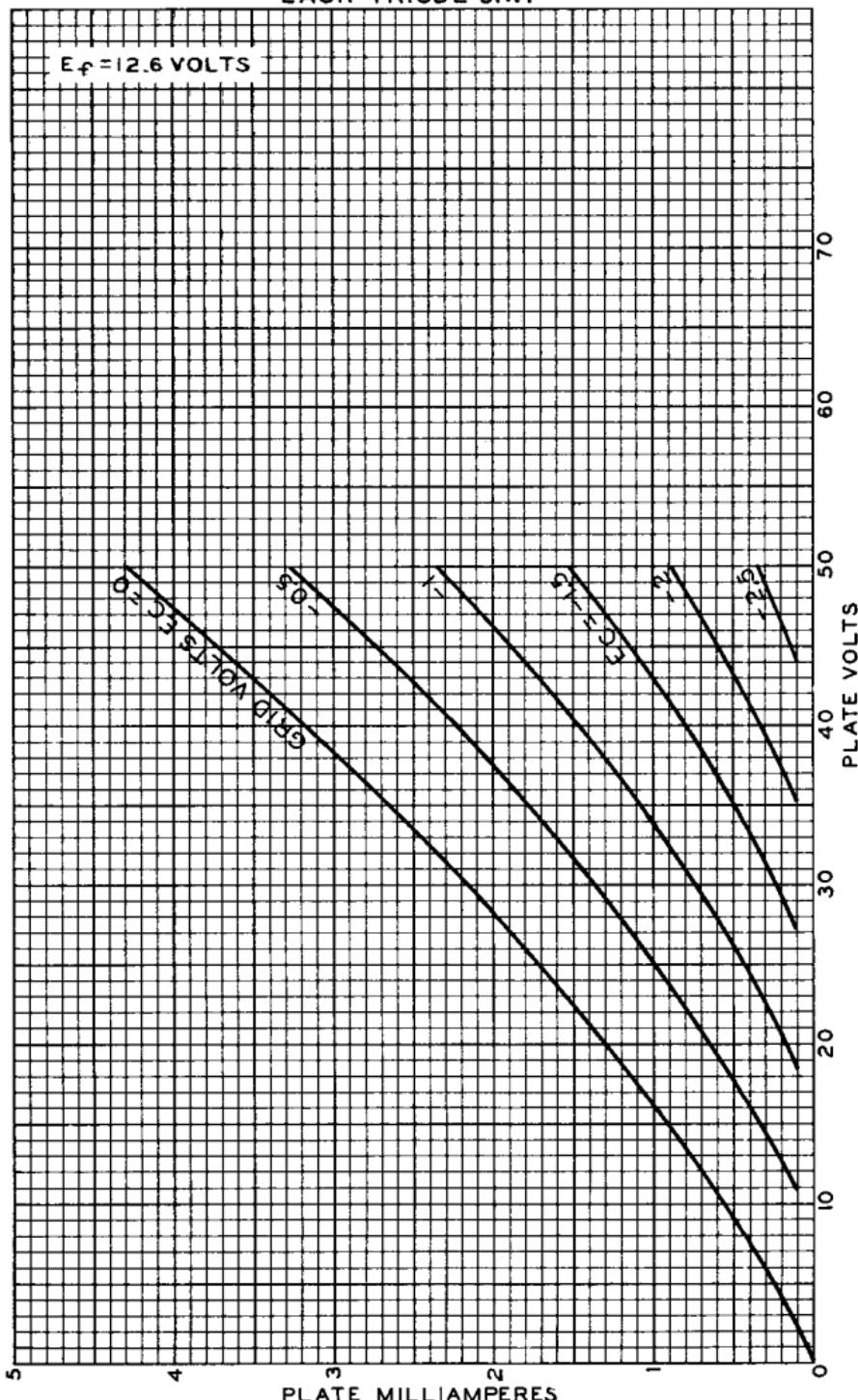
See RESISTANCE-COUPLED AMPLIFIER CHART, Type 6F8-G.

*The curves under Types 6J5 and 6SN7-GT  
also apply to each unit of the  
12SX7-GT*



I2SX7-GT

AVERAGE PLATE CHARACTERISTICS  
EACH TRIODE UNIT



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TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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