



5692

5692
SPECIAL RED
TUBE**MEDIUM-MU TWIN TRIODE**

Intended for critical industrial applications where 10,000-hour life, extreme uniformity, rigid construction, and exceptional stability are paramount. Within its ratings, the 5692 may be used to replace its receiving-tube counterpart, type 6SN7-GT.

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathodes:

Voltage. $6.3 \pm 5\%$ * . . . ac or dc volts

Current. 0.6 amp

Direct Interelectrode Capacitances:⁰

	<u>Min.</u>	<u>Av.</u>	<u>Max.</u>	
Triode No.1:				
Grid to Plate.	3.0	3.5	4.0	$\mu\mu\text{f}$
Grid to Cathode.	1.8	2.3	2.8	$\mu\mu\text{f}$
Plate to Cathode.	2.0	2.5	3.0	$\mu\mu\text{f}$
Triode No.2:				
Grid to Plate.	2.8	3.3	3.8	$\mu\mu\text{f}$
Grid to Cathode.	2.1	2.6	3.1	$\mu\mu\text{f}$
Plate to Cathode.	2.2	2.7	3.2	$\mu\mu\text{f}$
Plate of Triode No.1 to				
Plate of Triode No.2	0.27	0.32	0.37	$\mu\mu\text{f}$

* Heater voltage may deviate $\pm 10\%$ from rated value, provided such deviation occurs for less than 2% of the operating time.

⁰ with no external shield.

Mechanical:

Mounting Position. Any

Maximum Overall Length 2-7/8"

Maximum Seated Length. 2-5/16"

Maximum Diameter 1-9/32"

Bulb T-9

Base Short Intermediate-Shell Octal
8-Pin, Non-Hygroscopic

Basing Designation for BOTTOM VIEW 8BD

Pin 1-Grid of
Triode No.2Pin 2-Plate of
Triode No.2Pin 3-Cathode of
Triode No.2Pin 4-Grid of
Triode No.1Pin 5-Plate of
Triode No.1Pin 6-Cathode of
Triode No.1

Pin 7-Heater

Pin 8-Heater

(continued on next page)

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MEDIUM-MU TWIN TRIODE

INDUSTRIAL SERVICE

Including applications such as dc amplifiers, audio amplifiers,
and relaxation oscillators.

Values are for each unit

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE	275 max.	volts
DC PLATE-SUPPLY VOLTAGE.	330 max.	volts
GRID VOLTAGE:		
Negative bias range.	1 ^o min. to 100 max.	volts
Negative peak value.	200 max.	volts
DC GRID CURRENT.	2 max.	ma
DC CATHODE CURRENT	15 max.	ma
PLATE DISSIPATION.	1.75 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	100 max.	volts
Heater positive with respect to cathode. .	100 max.	volts
AMBIENT TEMPERATURE RANGE.	-55 to +90	°C

• For resistance-coupled amplifier applications, the negative bias may be as low as 0.5 volt.

Maximum Circuit Value (for any operating condition):

Grid-Circuit Resistance.	2 max.	megohms
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Characteristics and Range Values:

Heater Volts, 6.3; Plate Volts, 250; Grid Volts, -9

	<u>Min.</u>	<u>Avg.</u>	<u>Max.</u>	
Heater Current	0.55	0.6	0.65	amp
Heater-Cathode Current with heater-cathode voltage of ± 100 volts.	-	-	5	μamp
Plate Current.	4.8	6.5	8.2	ma
Difference in Plate Current between triode units	-	-	2.0	ma
Plate Current for grid volt- age of -24 volts	-	-	15	μamp
Reverse Grid Current	-	-	0.2	μamp
Amplification Factor	18	20	22	
Plate Resistance	-	9100	-	ohms
Transconductance	1825	2200	2575	μmhos

Typical Operation as Resistance-Coupled Amplifier (Each Unit)

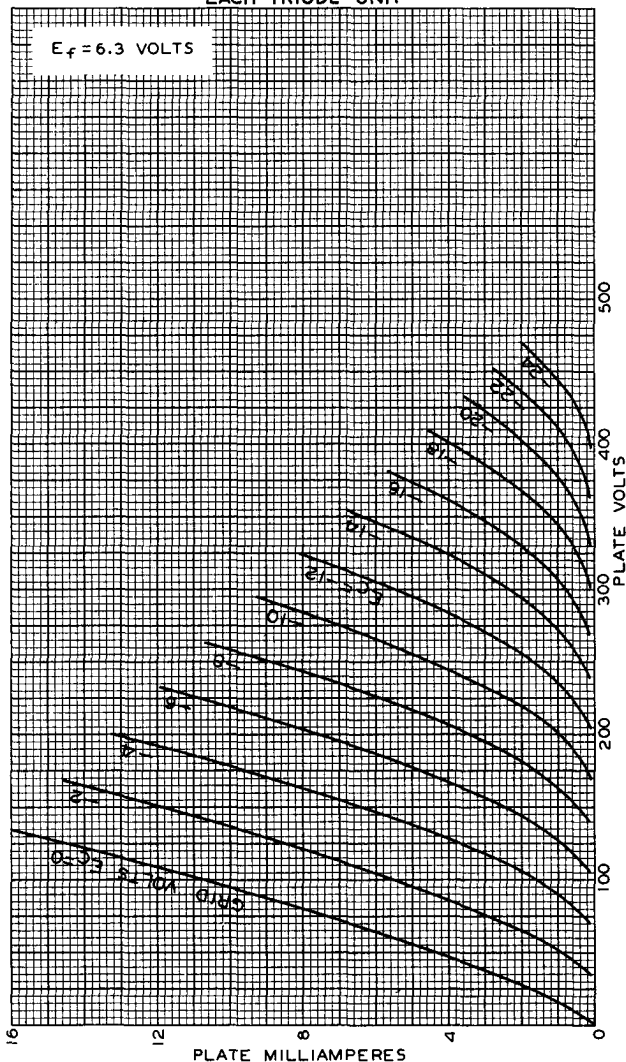
See RESISTANCE-COUPLED AMPLIFIER CHART No. 13 at front of
Receiving Tube Section.

OUTLINE DIMENSIONS for the 5692 are the same
as those shown for type 5691



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AVERAGE PLATE CHARACTERISTICS
EACH TRIODE UNIT

FEB. 21, 1941

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

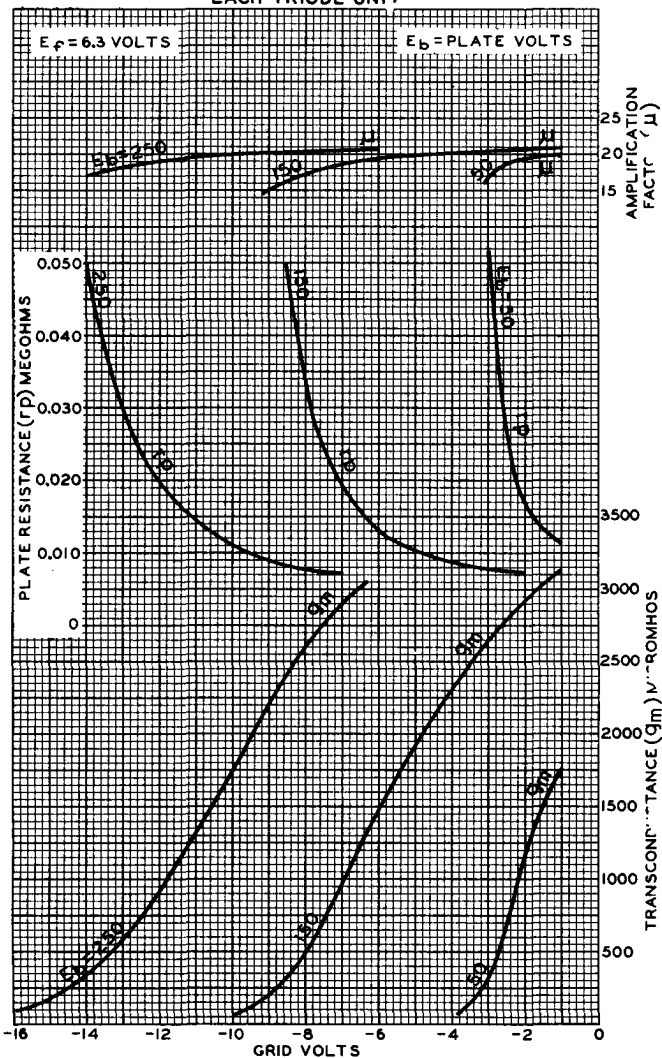
92CM-6257

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AVERAGE CHARACTERISTICS EACH TRIODE UNIT

 $E_f = 6.3$ VOLTS E_b = PLATE VOLTS

NOV. 10, 1947

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6914