



6BG6-G

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BEAM POWER TUBE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage.	6.3	ac or dc volts
Current.	0.9	amp

Direct Interelectrode Capacitances (Approx.):^o

Grid No.1 to plate	0.34	μmf
Grid No.1 to cathode & grid No.3, grid No.2, and heater.	12	μmf
Plate to cathode & grid No.3, grid No.2, and heater.	6.5	μmf

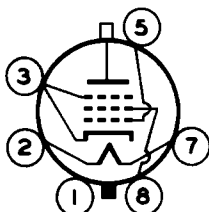
Characteristics, Class A₁ Amplifier:

Plate Voltage.	60	250	volts
Grid-No.2 (Screen) Voltage	250	250	volts
Grid-No.1 (Control-Grid) Voltage	0	-15	volts
Mu-Factor, Grid No.2 to Grid No.1.	-	8	
Plate Resistance (Approx.)	-	25000	ohms
Transconductance	-	6000	μmhos
Plate Current.	180*	75	ma
Grid-No.2 Current.	18*	4	ma
Grid-No.1 Voltage (Approx.) for plate current of 1 ma.	-	-45	volts

Mechanical:

Mounting Position.	Vertical, base up or down, or Horizontal with pins 2 and 7 in vertical plane
Maximum Overall Length	5-11/16"
Seated Length.	4-31/32" $\pm$ 5/32"
Maximum Diameter	2-1/16"
Dimensional Outline.	See General Section
Bulb	ST-16
Cap.	Small (JETEC No.C1-1)
Base	Medium-Shell Octal 6-Pin (JETEC No.B6-13)
Basing Designation for BOTTOM VIEW.	5BT

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Cathode,
Grid No.3



Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Grid No.2
Cap - Plate

^o Without external shield.

* These values can be measured by a method involving a recurrent wave form such that the cathode current and grid-No.2 input will be kept within ratings in order to prevent damage to the tube.

← Indicates a change.



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HORIZONTAL DEFLECTION AMPLIFIER

→ **Maximum Ratings, Design-Center Values Except as Noted:***For operation in a 525-line, 30-frame system[□]*

DC PLATE VOLTAGE	700	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute maximum) [●]	6600 [■]	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500	max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE	350	max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-50	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	300	max.	volts
CATHODE CURRENT:			
Peak	400	max.	ma
Average	110	max.	ma
GRID-No.2 INPUT	3.2	max.	watts
PLATE DISSIPATION [†]	20	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 [▲]	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface).	210	max.	°C

→ **Maximum Circuit Values:**

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation[†] 0.47 max. megohm

□ As described in "Standards of Good Engineering Practice concerning Television Broadcast Stations", Federal Communications Commission.

■ Under no circumstances should this absolute value be exceeded.

● The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

† It is essential that the plate dissipation be limited in the event of loss of grid signal. For this purpose, some protective means such as a cathode resistor of suitable value should be employed.

▲ The dc component must not exceed 100 volts.

→ Indicates a change.

SEPT. 1, 1955

TUBE DIVISION

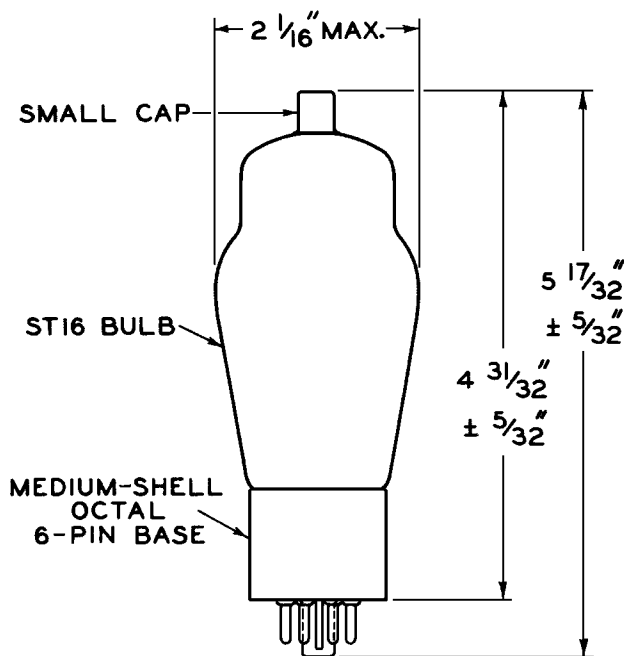
DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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6BG6-G BEAM POWER AMPLIFIER



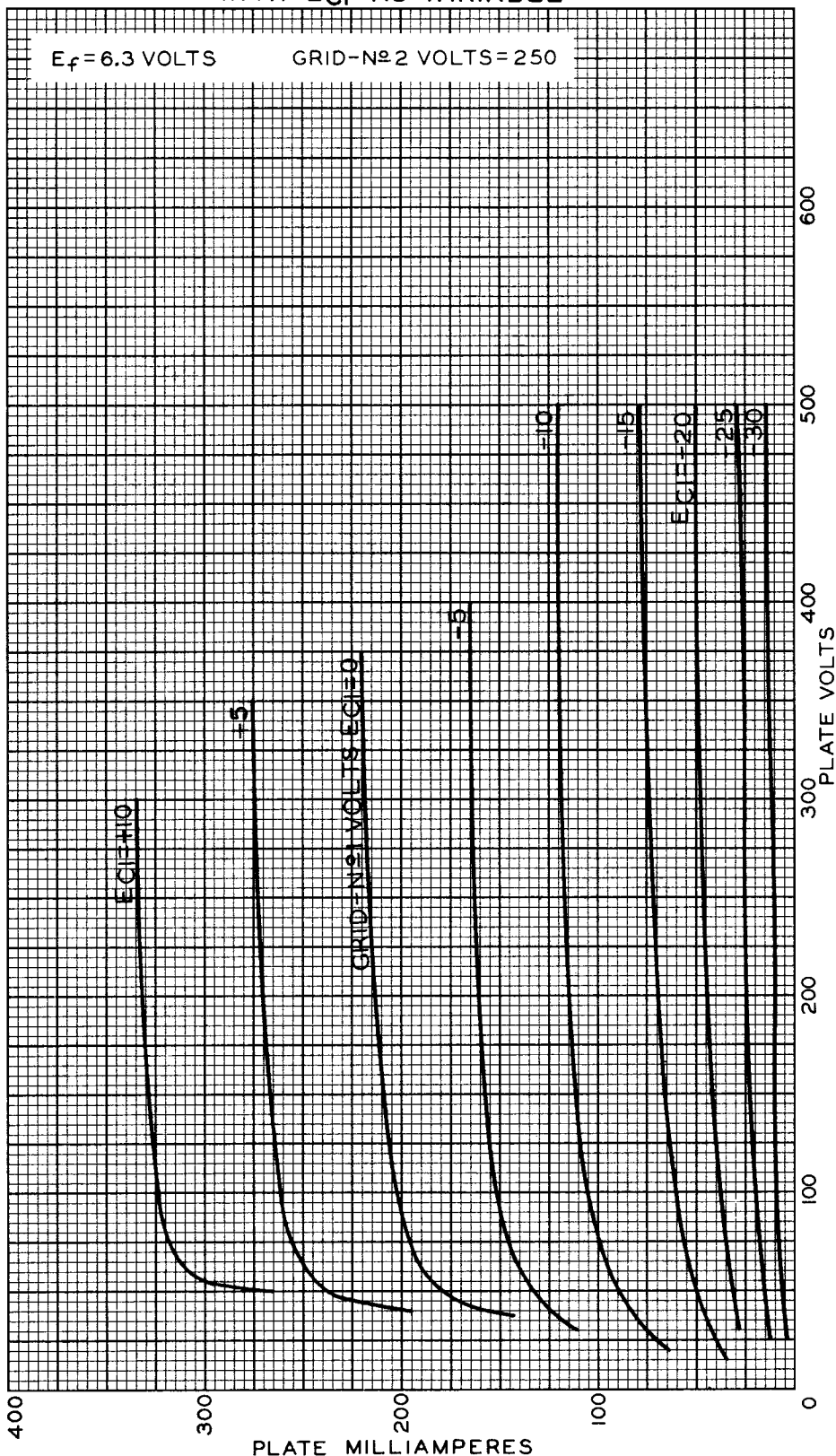
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AVERAGE PLATE CHARACTERISTICS WITH E_{C1} AS VARIABLE



JUNE 18, 1947

PLATE MILLIAMPERES

TUBE DEPARTMENT

92CM-6774R1

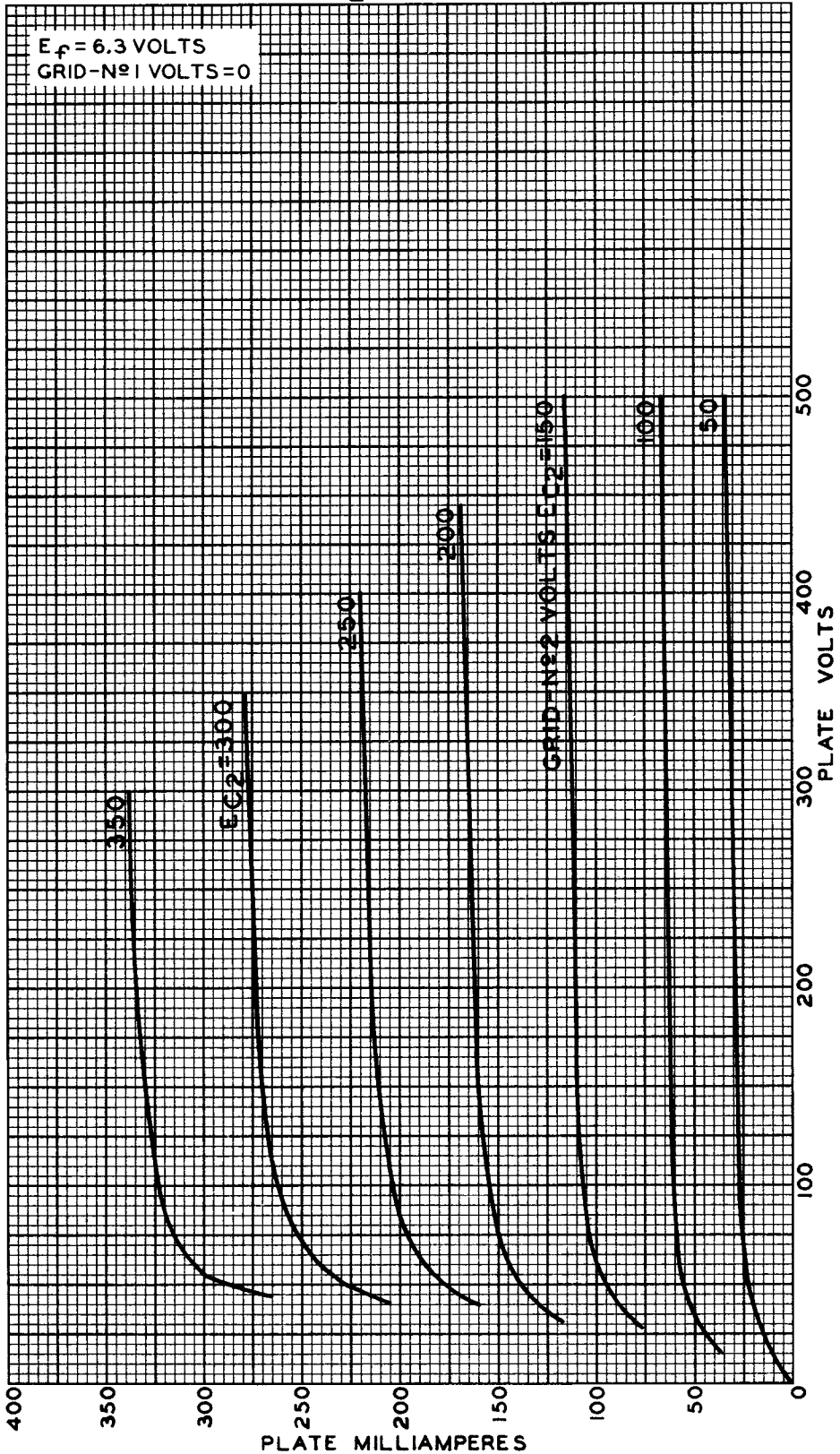
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6BG6-G

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AVERAGE PLATE CHARACTERISTICS WITH E_{C2} AS VARIABLE



JUNE 25, 1947

PLATE MILLIAMPERES

TUBE DEPARTMENT

92CM-6775RI

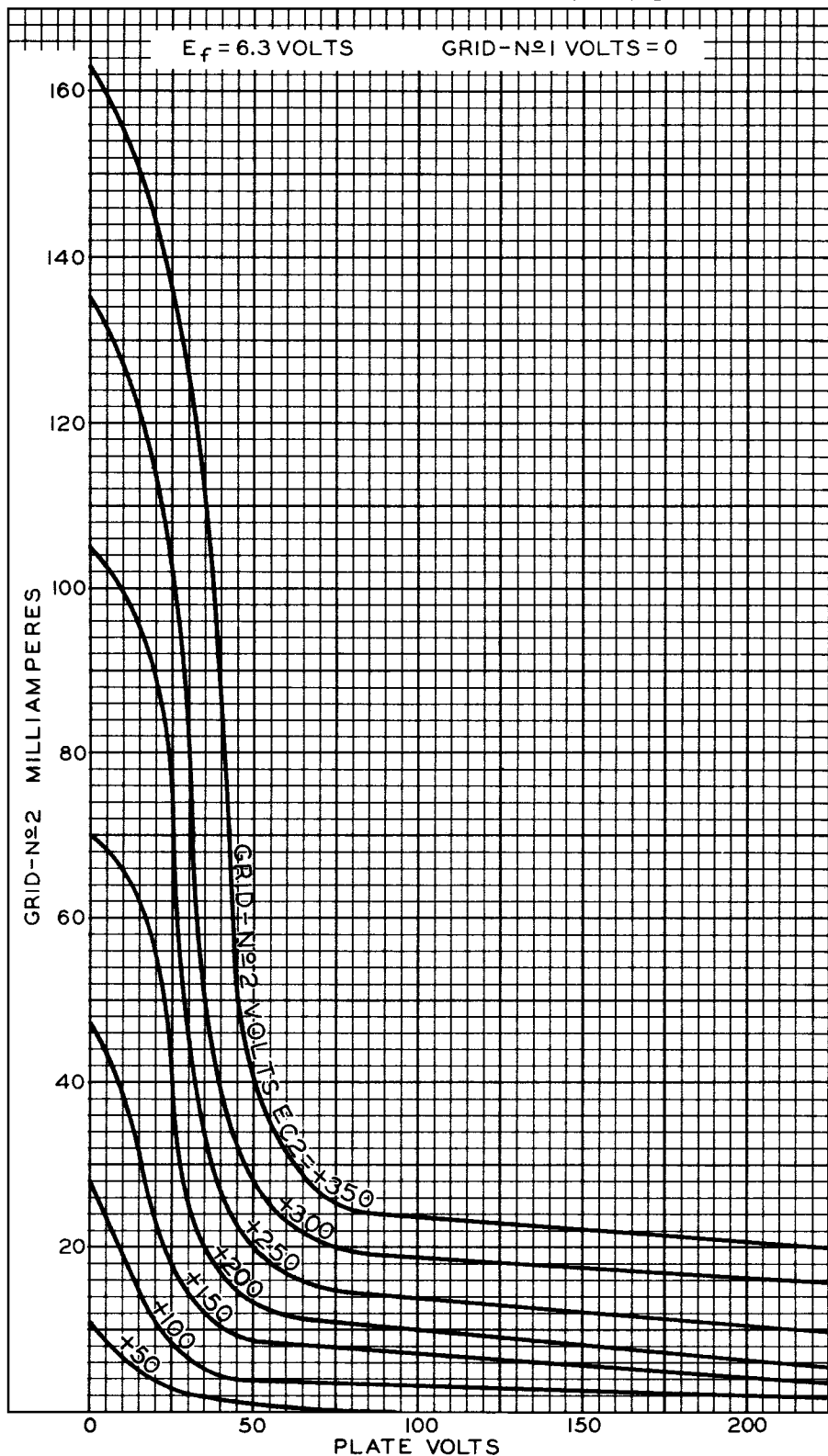
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TYPICAL CHARACTERISTICS



JUNE 23, 1947

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92CM-6776R1

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