



6BL7-GTA

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MEDIUM-MU TWIN TRIODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage. 6.3 ac or dc volts
 Current. 1.5 amp

Direct Interelectrode Capacitances (Approx.):^o

	Unit No.1	Unit No.2	
Grid to plate.	6	6	$\mu\mu\text{f}$
Grid to cathode and heater . . .	4.2	4.6	$\mu\mu\text{f}$
Plate to cathode and heater. . .	0.9	0.9	$\mu\mu\text{f}$

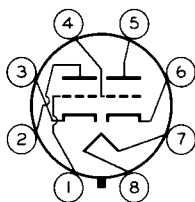
Characteristics, Class A₁ Amplifier (Each Unit):

Plate Voltage.	150	250	250	volts
Grid Voltage	0	-17	-9	volts
Amplification Factor	-	-	15	
Plate Resistance (Approx.)	-	-	2150	ohms
Transconductance	-	-	7000	μmhos
Plate Current.	65*	4	40	ma
Grid Voltage (Approx.) for plate current of 50 μa	-	-	-23	volts

Mechanical:

Operating Position Any
 Maximum Overall Length 3-5/16"
 Maximum Seated Length. 2-3/4"
 Maximum Diameter 1-9/32"
 Dimensional Outline. See General Section
 Bulb T9
 Base Short Intermediate-Shell Octal 8-Pin
 with External Barriers (JETEC No.88-58)
 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

VERTICAL DEFLECTION OSCILLATOR[♦]

Unless Otherwise Specified, Values are for Each Unit

Maximum Ratings, Design-Center Values:

For operation in a 525-line, 30-frame system[□]

DC PLATE VOLTAGE 500 max. volts
 PEAK NEGATIVE-PULSE GRID VOLTAGE 400 max. volts

^o, *, [♦], [□]: See next page.



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CATHODE CURRENT:

Peak	210	max.	ma
DC	60	max.	ma

PLATE DISSIPATION:

Either plate	10	max.	watts
Both plates (Both units operating) . . .	12	max.	watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	200	max.	volts
Heater positive with respect to cathode.	200 [▲]	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance.	4.7	max.	megohms
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VERTICAL DEFLECTION AMPLIFIER[◆]

Unless Otherwise Specified, Values are for Each Unit

Maximum Ratings, Design-Center Values Except as Noted:

For operation in a 525-line, 30-frame system[□]

DC PLATE VOLTAGE	500	max.	volts
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PEAK POSITIVE-PULSE PLATE VOLTAGE[#]

(Absolute maximum)	2000 [■]	max.	volts
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PEAK NEGATIVE-PULSE GRID VOLTAGE	250	max.	volts
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CATHODE CURRENT:

Peak	210	max.	ma
DC	60	max.	ma

PLATE DISSIPATION:

Either plate [†]	10	max.	watts
Both plates (Both units operating) . . .	12	max.	watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	200	max.	volts
Heater positive with respect to cathode.	200 [▲]	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:

For Cathode-bias operation [†]	4.7	max.	megohms
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○ Without external shield.

* This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

◆ when this tube type is operated as a combined vertical deflection oscillator and amplifier, it is recommended that unit No. 1 (pins 4, 5, and 6) be used as the oscillator.

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

▲ The dc component must not exceed 100 volts.

This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

■ Under no circumstances should this absolute value be exceeded.

† In stages operating with grid-resistor bias, an adequate cathode resistor or other suitable means is required to protect the tube in the absence of excitation.



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6BL7-GTA AVERAGE PLATE CHARACTERISTICS EACH UNIT

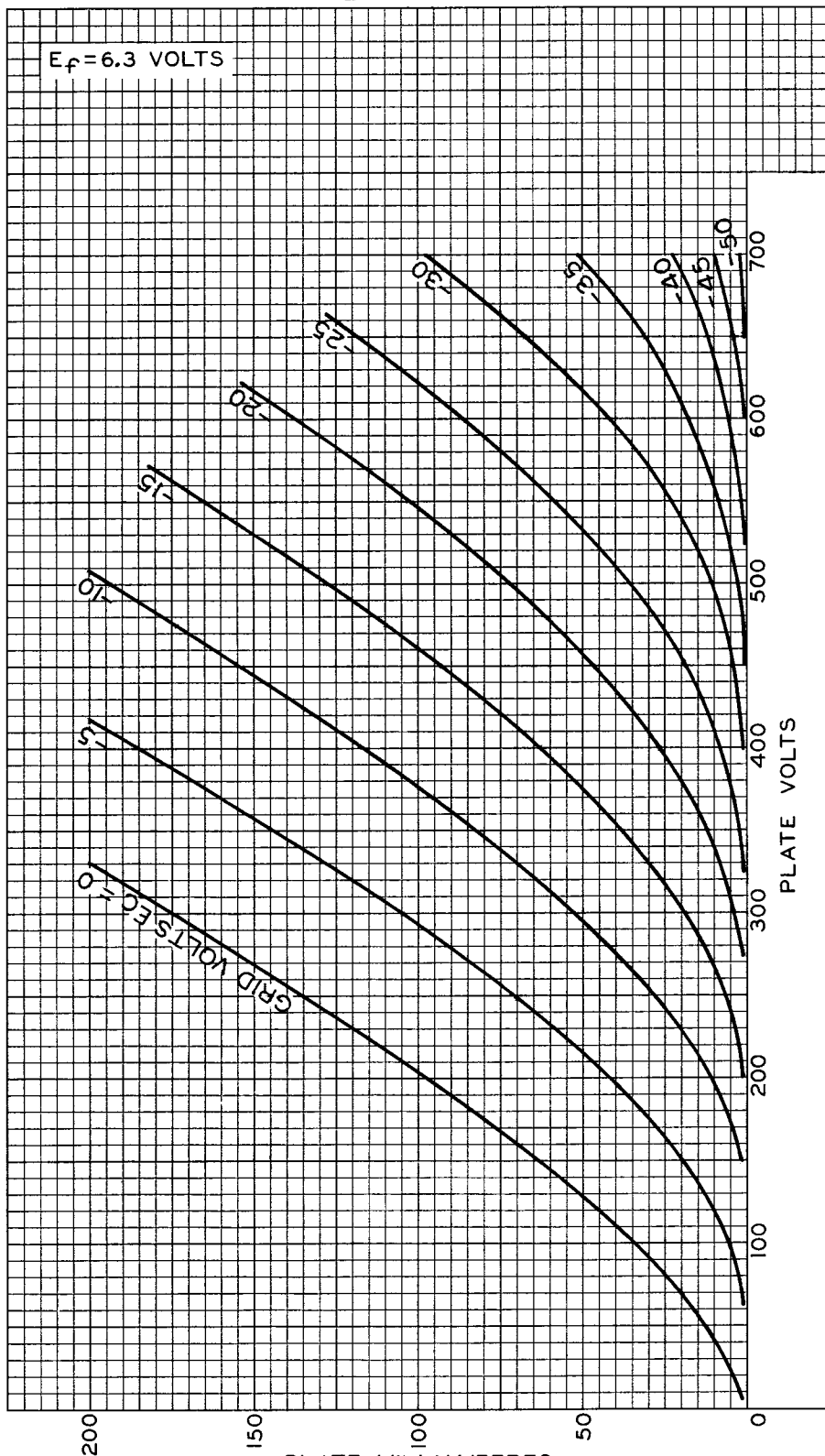


PLATE MILLIAMPERES

ELECTRON TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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