6BL7-GTA

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.):[○]

	Unit No.1	Unit No.2	
Grid to plate	6	6	μμf
Grid to cathode and heater	4.2	4.6	μμf
Plate to cathode and heater	0.9	0.9	μμf

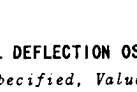
Characteristics, Class A_1 Amplifier (Each Unit):

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.B8-58)
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

○,*,◆,□: See next page.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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MEDIUM-MU TWIN TRIODE

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

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
PEAK POSITIVE-PULSE PLATE VOLTAGE# (Absolute maximum)	2000■	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	250	max.	volts
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

° 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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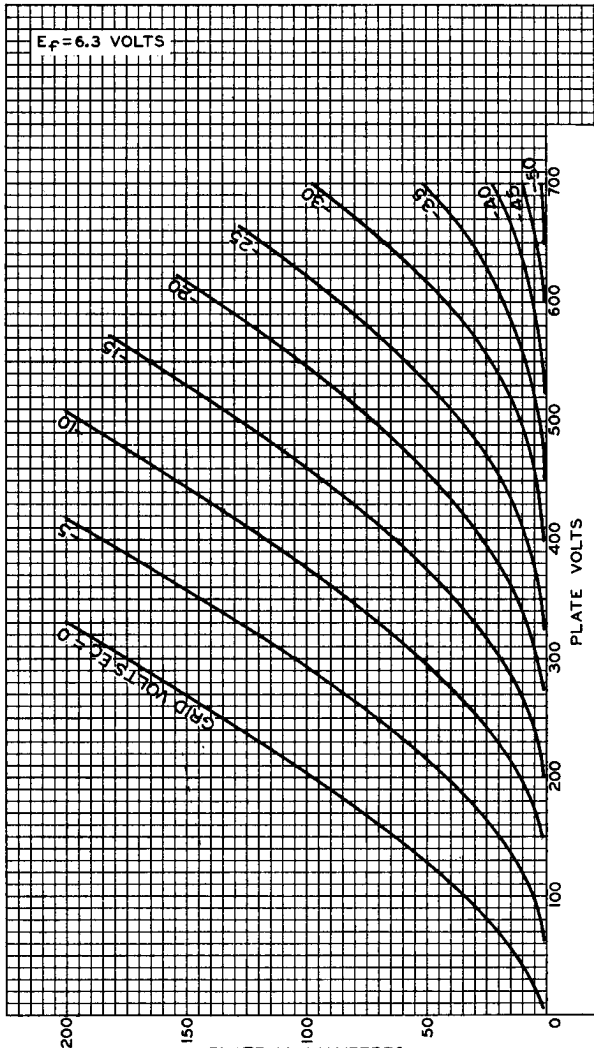
AVERAGE PLATE CHARACTERISTICS

EACH UNIT



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