6GL7

Dual Triode

With High-Mu Unit and Low-Mu Unit

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	1.05	amp
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200[a] max.	volts

Direct Interelectrode Capacitances (Approx.):[b]

	Unit No.1	*Unit No.2*	
Grid to plate	4.0	8.0	pf
Grid to cathode and heater	2.2	6.0	pf
Plate to cathode and heater	0.6	1.3	pf

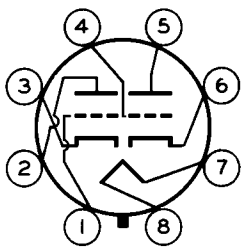
Characteristics, Class A_1 Amplifier:

	Unit No.1		*Unit No.2*		
Plate Voltage	250	275	60	175	volts
Grid Voltage	−3	[c]	0[d]	−25	volts
Amplification Factor	66	–	–	5	
Plate Resistance (Approx.)	30000	–	–	780	ohms
Transconductance	2200	1600	–	6400	μmhos
Plate Current	2	13	100	46	ma
Grid Voltage (Approx.) for plate μa =					
20	−5.3	–	–	–	volts
200	–	–	–	−60	volts

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	3"
Maximum Seated Length	2-7/16"
Maximum Diameter	1-9/32"
Bulb	T9
Base	Intermediate-Shell Octal 8-Pin, (JEDEC Group 1, No.B8-6)
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

Values are for Unit No.1

Maximum Ratings, *Design-Maximum Values:*

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

DC PLATE VOLTAGE	350 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	400 max.	volts
PLATE DISSIPATION	1 max.	watt

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation	1 max.	megohm
For cathode-bias operation	2.2 max.	megohms

VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

Maximum Ratings, *Design-Maximum Values:*

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

DC PLATE VOLTAGE	550 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[f]	1500 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	250 max.	volts
CATHODE CURRENT:		
Peak	175 max.	ma
Average	50 max.	ma
PLATE DISSIPATION	10[g] max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation	1 max.	megohm
For cathode-bias operation	2.2 max.	megohms

[a] The dc component must not exceed 100 volts.

[b] Without external shield.

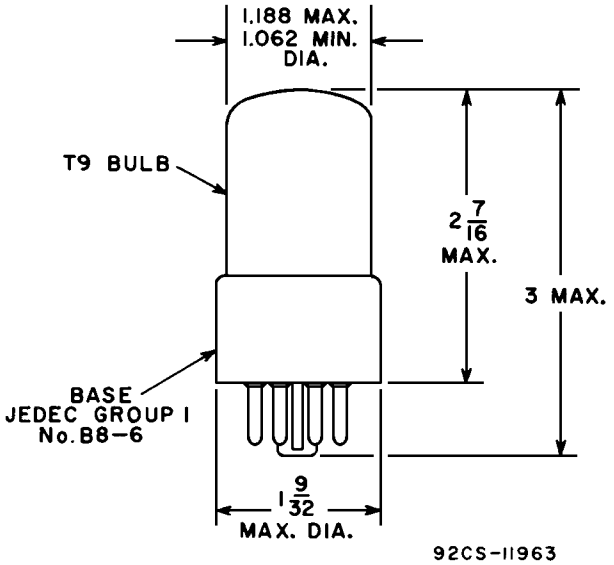
[c] Adjusted for plate ma.=13.

[d] Applied for short interval (two seconds maximum) so as not to damage tube.

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

[f] This rating is applicable when 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.

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



ALL DIMENSIONS IN INCHES