

Dual Triode

With Medium-Mu Unit and Low-Mu Unit

For Equipment Having Series Heater-String Arrangement

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	9.7	volts
Current	0.6 $\pm$ 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances (Approx.):[▲]

	Unit No.1	Unit No.2	
Grid to plate	4.4	9.5	μ f
Grid to cathode and heater. . .	2.2	7	μ f
Plate to cathode and heater . .	0.6	1.6	μ f

Characteristics, Class A₁ Amplifier:

	Unit No.1	Unit No.2	
Plate Voltage	250	150	volts
Grid Voltage.	-11	-17.5	volts
Amplification Factor.	17.5	6	
Plate Resistance (Approx.) . . .	8750	800	ohms
Transconductance.	2000	7500	μ mhos
Plate Current	5.5	45	ma
Plate Current for grid volts = -25.	-	8	ma
Plate Current for plate volts			
= 60 and grid volts = 0	-	95 [●]	ma
Grid Voltage (Approx.) for plate			
μ a = 10	-20	-	volts
Grid Voltage (Approx.) for plate			
μ a = 100.	-	-40	volts

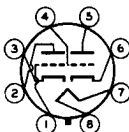
Mechanical:

Operating Position.	Any
Maximum Overall Length.	3"
Maximum Seated Length	2-7/16"
Maximum Diameter.	1-9/32"
Bulb.	T9
Base.	Short Intermediate-Shell Octal 8-Pin

with External Barriers (JEDEC Group 1, 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

Values are for Unit No.1

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system*

DC PLATE VOLTAGE.	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE.	400	max.	volts
CATHODE CURRENT:			
Peak.	77	max.	ma
Average	22	max.	ma
PLATE DISSIPATION	1.5	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. 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*

DC PLATE VOLTAGE.	330	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE [†]	1500	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE.	250	max.	volts
CATHODE CURRENT:			
Peak.	175	max.	ma
Average	50	max.	ma
PLATE DISSIPATION	10	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. 2.2 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.

* 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.

DIMENSIONAL OUTLINE

shown under Type 6EM7 also applies to the 10EG7