

10EG7

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 ± 6% amp
 Warm-up time (Average) 11 sec
 Direct Interelectrode Capacitances (Approx.):

	<i>Unit No.1</i>	<i>Unit No.2</i>	
Grid to plate	4.4	9.5	$\mu\mu\text{f}$
Grid to cathode and heater. . .	2.2	7	$\mu\mu\text{f}$
Plate to cathode and heater . .	0.6	1.6	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

	<i>Unit No.1</i>	<i>Unit No.2</i>	
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	μmhos
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 $\mu\text{a} = 10$	-20	-	volts
Grid Voltage (Approx.) for plate $\mu\text{a} = 100$	-	-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. B8-58)
 Basing Designation for BOTTOM VIEW. 8BD

Pin 1 - Grid of Unit No.2		Pin 5 - Plate of Unit No.1
Pin 2 - Plate of Unit No.2		Pin 6 - Cathode of Unit No.1
Pin 3 - Cathode of Unit No.2		Pin 7 - Heater
Pin 4 - Grid of Unit No.1		Pin 8 - Heater



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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

RADIO CORPORATION OF AMERICA
Electron Tube Division

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