



12EN6

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BEAM POWER TUBE

Intended for use in equipment having
series heater-string arrangement

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	12.6	volts
Current	0.6 $\pm$ 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances

(Approx.):^o

Grid No.1 to plate.	0.65	μ f
Grid No.1 to cathode & grid No.3, grid No.2, and heater	14	μ f
Plate to cathode & grid No.3, grid No.2, and heater	8	μ f

Characteristics, Class A₁ Amplifier:

Plate Voltage	50	200	volts
Grid-No.2 Voltage	110	110	volts
Grid-No.1 Voltage	0	-9.5	volts
Plate Resistance (Approx.)	-	28000	ohms
Transconductance	-	8000	μ mhos
Plate Current	140*	50	ma
Grid-No.2 Current	17*	2.2	ma
Grid-No.1 Voltage (Approx.) for plate μ a = 100	-	-35	volts

Mechanical:

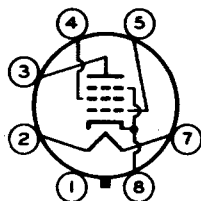
Operating Position.	Any
Maximum Overall Length.	3-5/16"
Maximum Seated Length	2-3/4"
Maximum Diameter.	1-9/32"
Dimensional Outline	See General Section

Bulb. T9

Base. Intermediate-Shell Octal 7-Pin (JEDEC Group 1,
No.B7-7), Short Intermediate-Shell Octal 7-Pin
with External Barriers (JEDEC Group 1, No.B7-59),
Intermediate-Shell Octal 6-Pin, Arrangement 2
(JEDEC Group 1, No.B6-81), or Short Intermediate-
Shell Octal 6-Pin with External Barriers,
Arrangement 2 (JEDEC Group 1, No.B6-84)

Basing Designation for BOTTOM VIEW. 7S

Pin 1 $\blacklozenge$ - No Connec-
tion
Pin 2 - Heater
Pin 3 - Plate
Pin 4 - Grid No.2



Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Cathode,
Grid No.3



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VERTICAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

	Pentode Unit	Pentode Unit (Triode Connection [†])	
DC PLATE VOLTAGE	300 max.	300 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE [#]	1200 max.	1200 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	150 max.	—	volts
PEAK NEGATIVE-PULSE GRID- No.1 (CONTROL-GRID) VOLTAGE	250 max.	250 max.	volts
CATHODE CURRENT:			
Peak	175 max.	175 max.	ma
Average	50 max.	50 max.	ma
GRID-No.2 INPUT	1.25 max.	—	watts
PLATE DISSIPATION	7 max.	7.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . .	300 [•] max.	300 [•] max.	volts
Heater positive with respect to cathode. . .	200 [▲] max.	200 [▲] max.	volts

Maximum Circuit Values:

	Pentode Unit	Pentode Unit (Triode Connection [†])	
Grid-No.1-Circuit Resistance	2.2 max.	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.

[◆] On the 6-pin bases, pin 1 as well as pin 6 is omitted.

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

[†] Grid No.2 connected to plate.

[#] 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.

[•] The dc component must not exceed 200 volts.

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