



12ED5

12ED5 BEAM POWER TUBE

7-PIN MINIATURE TYPE

*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	0.45 $\pm$ 6%	amp
Warm-up time (Average)	11	sec

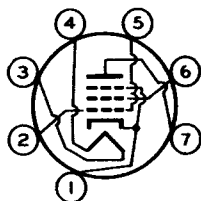
Direct Interelectrode Capacitances
(Approx.):^o

Grid No.1 to plate.	0.26	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	8.5	μ f

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length.	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" $\pm$ 3/32"
Diameter.	0.650" to 0.750"
Dimensional Outline	See General Section
Bulb.	T5-1/2
Base.	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW.	7CV

Pin 1 - Cathode,
Grid No.3
Pin 2 - Grid No.1
Pin 3 - Heater



Pin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.2
Pin 7 - Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE.	150	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE.	150	max.	volts
GRID-No.2 INPUT.	1.5	max.	watts
PLATE DISSIPATION.	6.25	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	300	max.	volts
Heater positive with respect to cathode.	200	max.	volts

Typical Operation and Characteristics:

Plate Voltage.	110	125	volts
Grid-No.2 Voltage.	110	125	volts
Grid-No.1 Voltage.	-4	-4.5	volts
Peak AF Grid-No.1 Voltage.	4	4.5	volts

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Zero-Signal Plate Current.	32	37	ma
Max.-Signal Plate Current.	31	36	ma
Zero-Signal Grid-No.2 Current.	4	7	ma
Max.-Signal Grid-No.2 Current.	8	11	ma
Plate Resistance (Approx.)	14000	14000	ohms
Transconductance	8100	8500	μ mhos
Load Resistance.	4500	4500	ohms
Total Harmonic Distortion.	5	5	%
Max.-Signal Power Output	1.1	1.5	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

○ Without external shield.

● The dc component must not exceed 200 volts.

▲ The dc component must not exceed 100 volts.