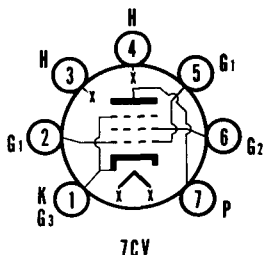


SYLVANIA TYPE 32ET5A **BEAM POWER AMPLIFIER**



MECHANICAL DATA

Bulb.....	T-5 1/2
Base.....	E7-1, Miniature Button 7-Pin
Outline.....	5-3
Basing.....	7CV
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

Heater Voltage.....	32 Volts
Heater Current ¹	100 Ma
Heater Warm-up Time ²	20 Seconds

Series Operation

Ratings (Design Maximum Values)

Heater Current ³	Min-Max 94-106 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total D C and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
D C.....	100 Volts
Total D C and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate.....	0.6 μmf
Input: g to (h + k + g2 + g3).....	12 μmf
Output: p to (h + k + g2 + g3).....	6.0 μmf

RATINGS (Design Maximum System)

Plate Voltage.....	150 Volts Max.
Grid No. 2 Voltage.....	130 Volts Max.
Plate Dissipation.....	5.4 Watts Max.
Grid No. 2 Dissipation.....	1.2 Watts Max.
Grid No. 1 Circuit Resistance	
Fixed Bias.....	0.1 Megohm Max.
Cathode Bias.....	0.5 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Voltage.....	110 Volts
Grid No. 2 Voltage.....	110 Volts
Grid No. 1 Voltage.....	-7.5 Volts
Peak AF Grid No. 1 Voltage.....	7.5 Volts
Zero-Signal Plate Current.....	30 Ma
Zero-Signal Grid No. 2 Current.....	2.8 Ma
Transconductance.....	5500 μmhos
Plate Resistance (approx.).....	21,500 Ohms
Load Resistance.....	2800 Ohms
Maximum-Signal Power Output.....	1.2 Watts
Total Harmonic Distortion (approx.).....	10 Percent

NOTES:

- For series operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current.
- Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
- Heater voltage supply variations shall be restricted to maintain heater current within the specified values.

APPLICATION

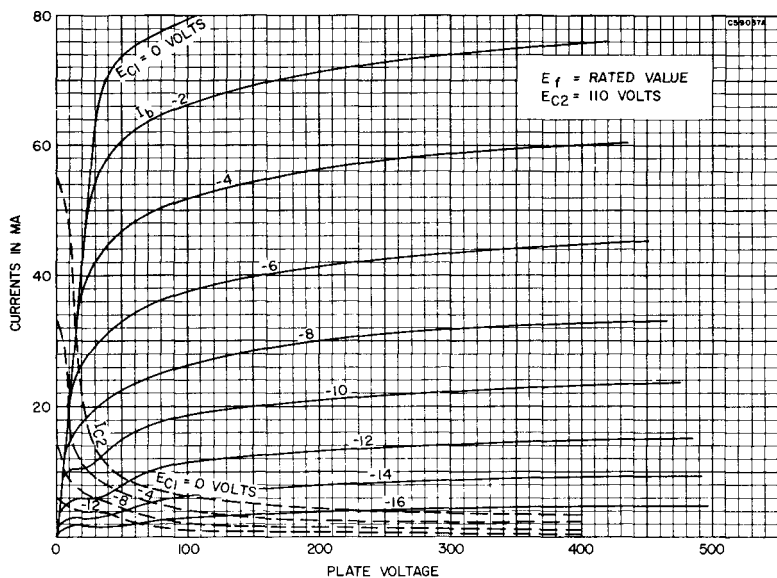
The Sylvania Type 32ET5A is a miniature beam power pentode designed for service as an audio output amplifier. It features high efficiency at relatively low plate and Grid No. 2 voltage.

Type 32ET5A designed for use in AC-DC radio receivers incorporates a 100 Ma heater controlled for heater warm-up time.

Type 32ET5A replaces obsolete Type 32ET5.

SYLVANIA TYPE 32ET5A (Cont'd)

AVERAGE PLATE CHARACTERISTICS



OPERATIONAL CHARACTERISTICS

