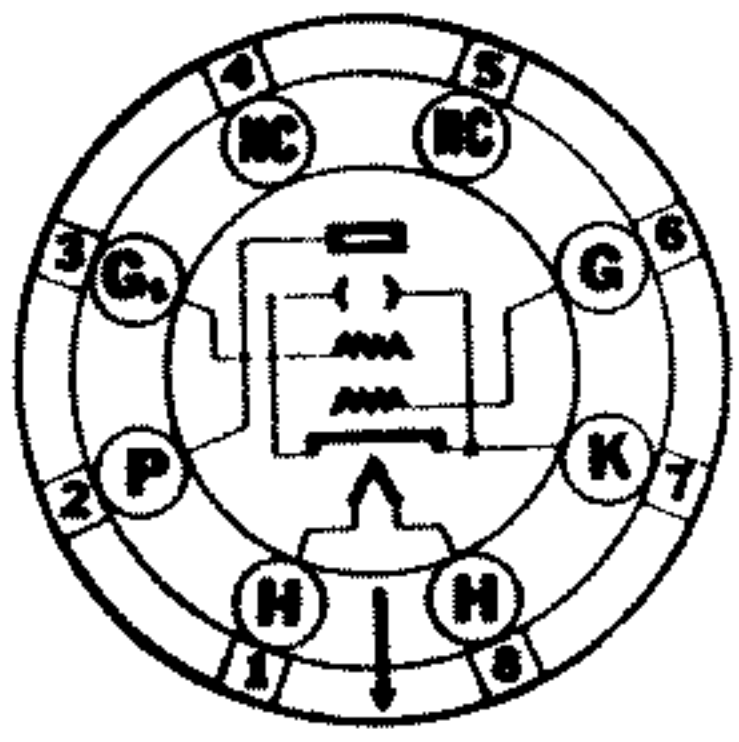


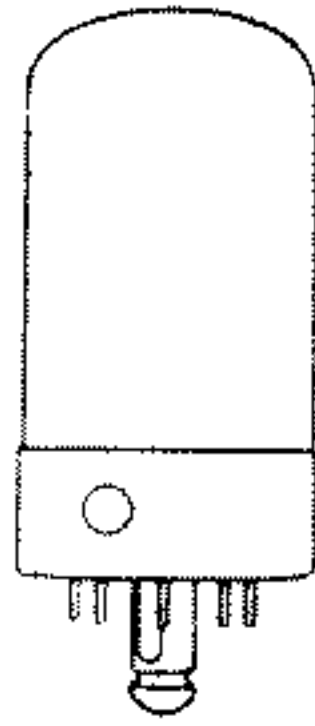
# Sylvania Type 7C5

BEAM POWER AMPLIFIER

GT EQUIVALENT 6V6GT



6AA-L-0



## PHYSICAL SPECIFICATIONS

Base.....	Lock-In 8 Pin
Bulb.....	T9
Maximum Overall Length.....	3 <sup>5</sup> / <sub>32</sub> "
Maximum Seated Height.....	2 <sup>5</sup> / <sub>8</sub> "
Mounting Position.....	Any

## RATINGS

Heater Voltage AC or DC (Nominal).....	7.0 Volts
Heater Current.....	0.48 Ampere
Maximum Plate Voltage.....	315 Volts
Maximum Screen Voltage.....	285 Volts
Maximum Plate Dissipation.....	12 Watts
Maximum Screen Dissipation.....	2 Watts
Maximum Heater-Cathode Voltage.....	90 Volts

### Direct Interelectrode Capacitances:\*

Grid to Plate.....	0.4 $\mu$ mf.
Input.....	9.5 $\mu$ mf.
Output.....	9.0 $\mu$ mf.

\*With 1<sup>5</sup>/<sub>16</sub>" diameter shield (RMA Std. M8-308) connected to cathode.

## TYPICAL OPERATION

### CLASS A<sub>1</sub> AMPLIFIER (ONE TUBE)

Heater Voltage.....	6.3	6.3	6.3 Volts
Heater Current.....	0.45	0.45	0.45 Ampere
Plate Voltage.....	180	250	315 Volts
Screen Voltage.....	180	250	225 Volts
Grid Voltage.....	-8.5	-12.5	-13.0 Volts
Self-Bias Resistor.....	260	250	360 Ohms
Peak Input Signal.....	8.5	12.5	13.0 Volts
Plate Current (Zero Signal).....	29	45	34 Ma.
Plate Current (Maximum Signal).....	30	47	35 Ma.
Screen Current (Zero Signal).....	3.0	4.5	2.2 Ma.
Screen Current (Maximum Signal).....	4.0	7.0	6.0 Ma.
Plate Resistance.....	58000	52000	77000 Ohms
Mutual Conductance.....	3700	4100	3750 $\mu$ mhos
Load Resistance.....	5500	5000	8500 Ohms
Power Output.....	2.0	4.5	5.5 Watts
Total Harmonic Distortion.....	8	8	12 Per Cent

### CLASS AB<sub>1</sub> AMPLIFIER (PUSH-PULL)

(Values are for two tubes)

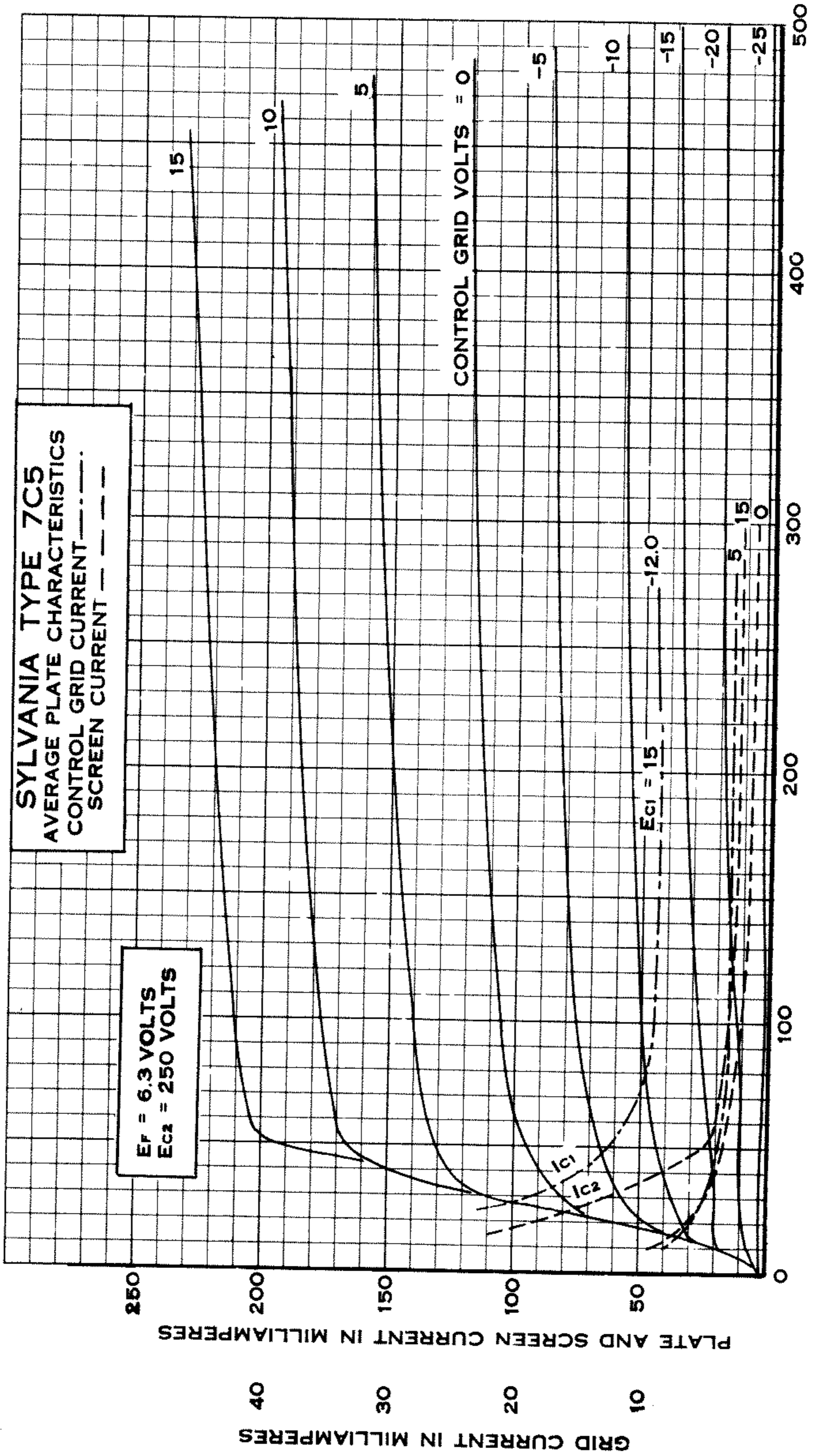
Heater Voltage.....	6.3	6.3 Volts
Heater Current.....	0.45	0.45 Ampere
Plate Voltage.....	250	285 Volts
Screen Voltage.....	250	285 Volts
Grid Voltage.....	-15	-19 Volts
Self-Bias Resistor.....	200	260 Ohms
Peak Input Signal (Grid to Grid).....	30	38 Volts
Plate Current (Zero Signal).....	70	70 Ma.
Plate Current (Maximum Signal).....	79	92 Ma.
Screen Current (Zero Signal).....	5	4 Ma.
Screen Current (Maximum Signal).....	13	13.5 Ma.
Plate Resistance.....	60000	65000 Ohms
Mutual Conductance.....	3750	3600 $\mu$ mhos
Load Resistance (Plate to Plate).....	10000	8000 Ohms
Power Output.....	10.0	14.0 Watts
Total Harmonic Distortion.....	5	3.5 Per Cent

## APPLICATION

Sylvania Type 7C5 is a beam power amplifier which provides high power output, power sensitivity, and efficiency with a low percentage of third and higher order harmonics. The electrical characteristics and applications are identical with those for Types 6V6 and 6V6G. The Type 7C5 should prove very desirable in applications where heater and plate current drain must be maintained at a minimum.

The lock-in construction provides compactness, suitable shielding and the special lock-in feature. For a-c service the 7-volt heater rating corresponds to a 130-volt line condition.

When fixed bias is employed the resistance in the grid circuit should not be greater than 0.05 megohm. With cathode bias the grid circuit resistance must not exceed 0.5 megohm.



CE45065

PLATE VOLTS