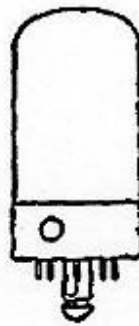


50A5 Sylvania Type

BEAM POWER AMPLIFIER



6AA-L-0

PHYSICAL SPECIFICATIONS

Base.....	Lock-In 8 Pin
Bulb.....	T-9
Maximum Overall Length.....	3 $\frac{5}{8}$ "
Maximum Seated Height.....	2 $\frac{5}{8}$ "
Mounting Position.....	Any

RATINGS

Heater Voltage AC or DC.....	50.0 Volts
Heater Current.....	0.150 Ampere
Maximum Plate Voltage.....	200 Volts
Maximum Screen Voltage.....	117 Volts
Maximum Plate Dissipation.....	10 Watts
Maximum Screen Dissipation.....	1.25 Watts
Maximum Heater-Cathode Voltage.....	90 Volts

TYPICAL OPERATION

CLASS A₁ AMPLIFIER

Heater Voltage AC or DC.....	50.0	50.0 Volts
Heater Current.....	0.150	0.150 Ampere
Plate Voltage.....	110	200 Volts
Screen Voltage.....	110	125 Volts
Grid Voltage*.....	-7.5	** Volts
Peak Signal Voltage.....	7.5	8.0 Volts
Self-Bias Resistor.....	175	180 Ohms
Zero Signal Plate Current.....	49	46 Ma.
Maximum Signal Plate Current.....	50	47 Ma.
Zero Signal Screen Current.....	4.0	2.2 Ma.
Maximum Signal Screen Current.....	10.0	8.5 Ma.
Plate Resistance.....	13,000	28,000 Ohms
Mutual Conductance.....	8000	8000 μ mhos
Load Resistance.....	2000	4000 Ohms
Power Output.....	2.1	3.8 Watts
Total Harmonic Distortion.....	10	10 Percent

*The maximum grid circuit resistance under fixed bias conditions should not exceed 0.1 megohm and for self-bias 0.5 megohm.

**Obtained by self-bias resistor; fixed bias operation not recommended.

(Cont'd) **50A5****APPLICATION**

Sylvania Type 50A5 is a beam power amplifier of Lock-In construction designed especially for use as an output tube in AC-DC receivers using other 150 ma. heater tubes operating in series heater circuits. The beam power construction gives high power output and good power sensitivity, at reasonable distortion levels. Transformer or impedance coupling is to be preferred for input circuits but resistance coupling methods are satisfactory provided the grid circuit resistance does not exceed 0.1 megohm with fixed bias or 0.5 megohms with self bias.

