

NATIONAL UNION TYPE 6E6

DUPLEX TRIODE POWER AMPLIFIER

The 6E6 is a heater-cathode type of tube combining two low-mu output triodes in one bulb. It is intended for use in the output stage of automobile radio receivers or a-c operated radio receivers. The triode units have separate external terminals for all electrodes except the cathodes and heaters, thus permitting the triode units to be operated either in parallel, or push-pull.

CHARACTERISTICS

Heater Voltage (A.C. or D.C.)	6.3 Volts
Heater Current	0.6 Amperes
Bulb	ST-14
Base	Medium 7-pin
Maximum Overall Height	4-11/16"
Maximum Diameter	1-13/16"

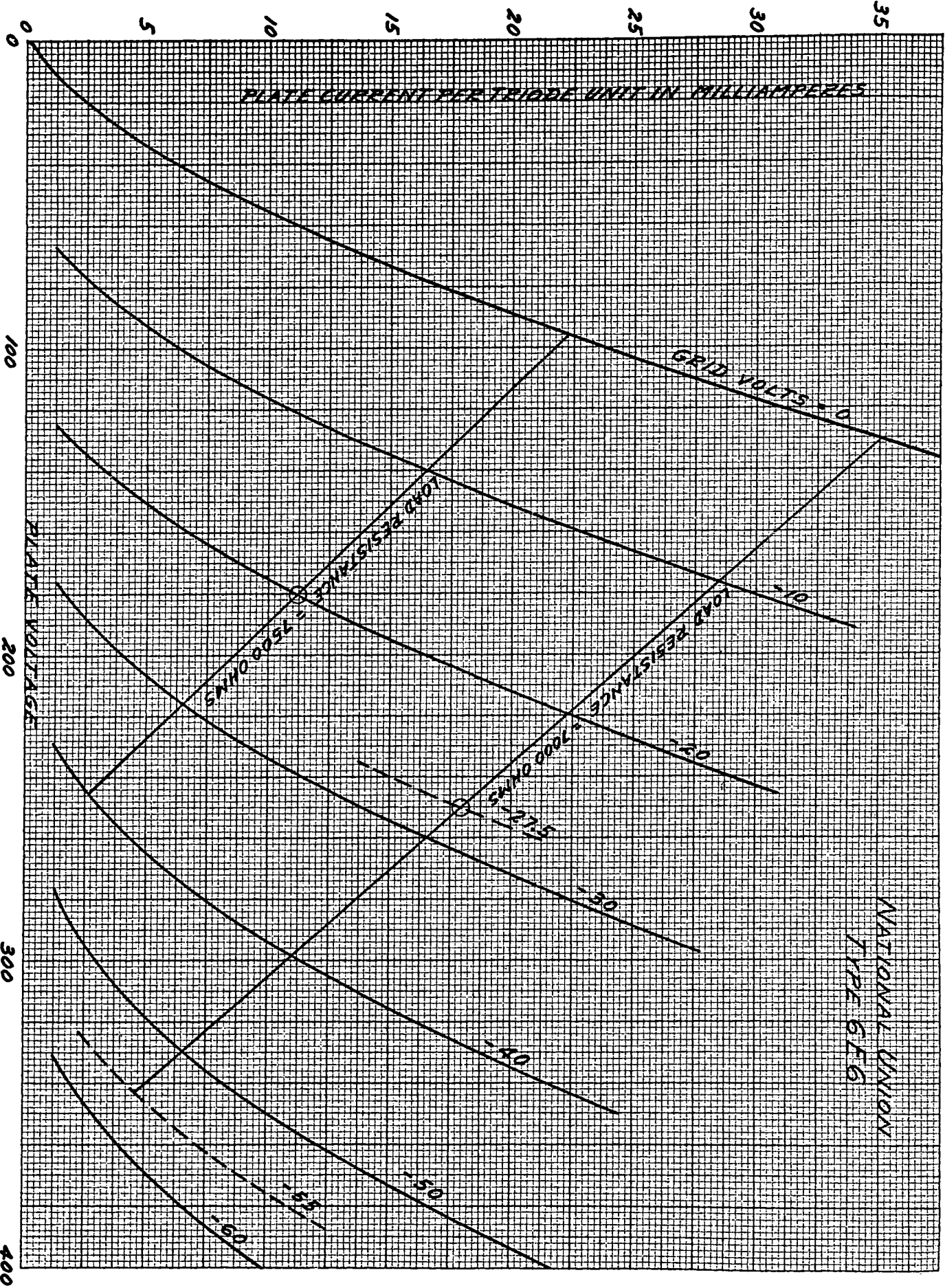
TYPICAL OPERATION:

Plate Voltage	180	250 Max. Volts
Grid Voltage	-20	-27.5 Volts
Plate Current	11.5	18 M.A. per Plate
Mutual Conductance	1400	1700 Micromhos per Triode
Amplification Factor	6.0	6.0
Plate Resistance	4300	3500 Ohms per Plate
Load Resistance	15000	14000 Ohms plate to Plate
Undistorted Power Output	0.75	1.6 Watts per Pair of Triodes

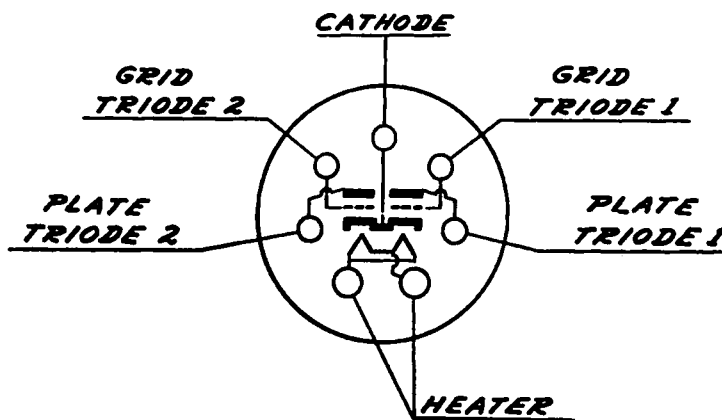
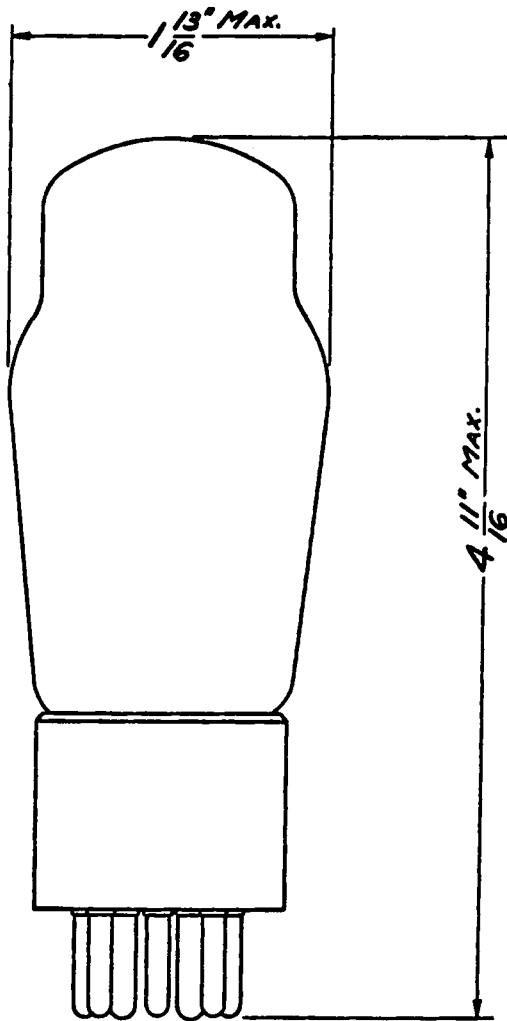
The 6E6, although primarily designed for push-pull service, may be used in single tube service without the second harmonic distortion exceeding five per cent. In the case of parallel operation of the triode, the proper load resistance is one-fourth of the plate-to-plate value given under "Characteristics."

It is preferable that grid voltage be obtained from a self-biasing resistor in the cathode circuit. For 250 volt operation, this resistor should be 770 ohms, while for 180 volt operation, it should be 870 ohms. For parallel tube operation, the resistor should either be heavily by-passed, or a suitable filter network be installed to prevent excessive degeneration at the lower frequencies. Transformer or impedance coupling to the grid circuit is recommended. Where a grid resistor is used with any type of input coupling, the resistance should not exceed one-half megohm per grid where self-bias is used. With fixed bias, the resistance should not exceed 100,000 ohms.

The base pins of the 6E6 fit the medium seven contact socket (0.855 inch pin-circle diameter) which may be installed to operate the tube in any position. Sufficient ventilation should be provided to permit of free air circulation around the tube to prevent overheating.



NATIONAL UNION TYPE 6E6



BOTTOM VIEW