

TUNG-SOL

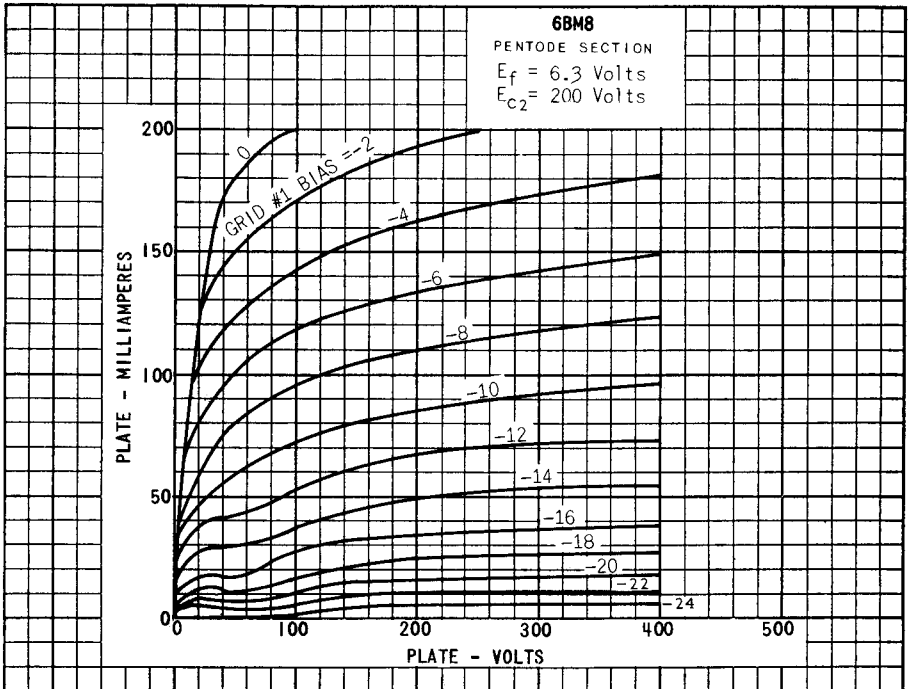
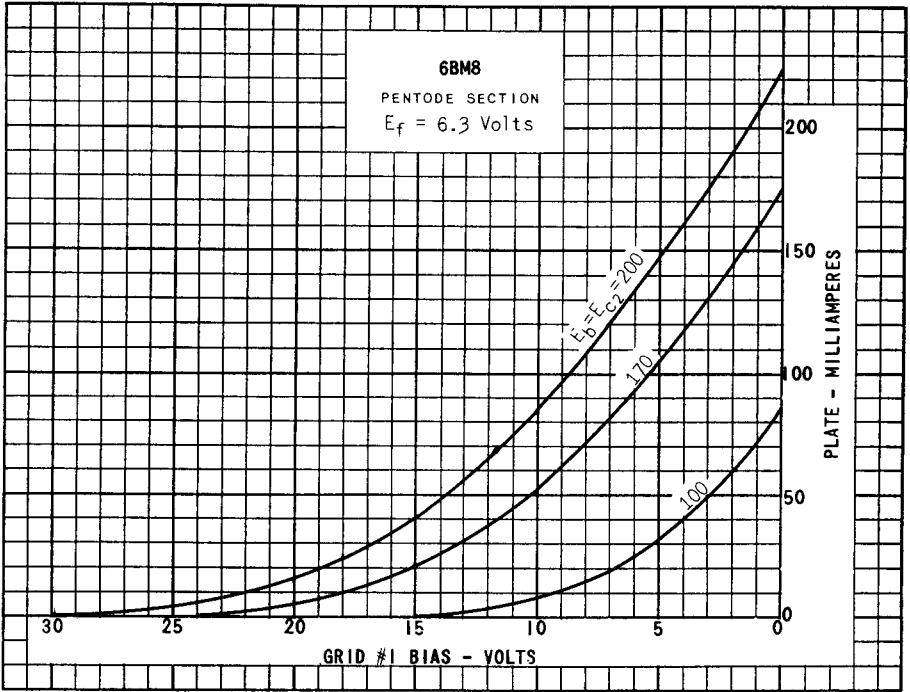
NOTES

- A MAXIMUM PULSE DURATION 4% OF ONE CYCLE WITH A MAXIMUM OF 0.8 MILLI SECOND.
- B PEAK PLATE CURRENT OF THE PENTODE SECTION IN VERTICAL OUTPUT APPLICATION.
TO ALLOW FOR TUBE SPREAD AND FOR DETERIORATION DURING LIFE THE CIRCUIT SHOULD BE DESIGNED AROUND A PEAK PLATE CURRENT NOT EXCEEDING 85 MAMPS AT A PLATE VOLTAGE OF 50 VOLTS AND A GRID #2 VOLTAGE OF 170 VOLTS. AT UNDERHEATING (HEATER VOLTAGE 5.3 VOLTS) A PEAK ANODE CURRENT OF 70 MAMPS SHOULD BE TAKEN INTO CONSIDERATION AT A PLATE VOLTAGE OF 50 VOLTS AND A GRID #2 VOLTAGE OF 170 VOLTS, AND A PEAK ANODE CURRENT OF 80 MAMPS AT A PLATE VOLTAGE OF 50 VOLTS AND A GRID #2 OF 190 VOLTS. THE PEAK PLATE CURRENT OF AN AVERAGE NEW TUBE IS 135 MAMPS AT A PLATE VOLTAGE OF 50 VOLTS, A GRID #2 VOLTAGE OF 170 VOLTS AND A GRID #1 CURRENT OF 0.3 MICROAMPERES.
- C OPTIMUM PEAK CATHODE CURRENT AS FRAME OSCILLATOR.
TO ALLOW FOR TUBE SPREAD, FOR DETERIORATION DURING LIFE AND FOR EMISSION DROP AT UNDERHEATING THE SET SHOULD BE DESIGNED SO THAT WITH A PEAK CATHODE OF 100 MILLIAMPS IT STILL OPERATES SATISFACTORILY (MAX. PULSE DURATION 4% OF A CYCLE, WITH A MAXIMUM OF 0.8 MILLISEC). IT IS RECOMMENDED THAT THE AMPLITUDE OF THE PEAK CURRENTS OCCURRING WITH FRESH TUBES BE LIMITED AUTOMATICALLY TO THIS MAX. VALUE OF 100 MILLI-AMPS (e. g. BY NON-BYPASSED RESISTOR IN THE GRID OR ANODE LEAD.
- D WITH GRID CURRENT BIASING THE MAXIMUM PERMISSABLE VALUE OF THE GRID CIRCUIT RESISTANCE IS 22 MEGOHMS.
MAXIMUM A.F. OUTPUT VOLTAGE.

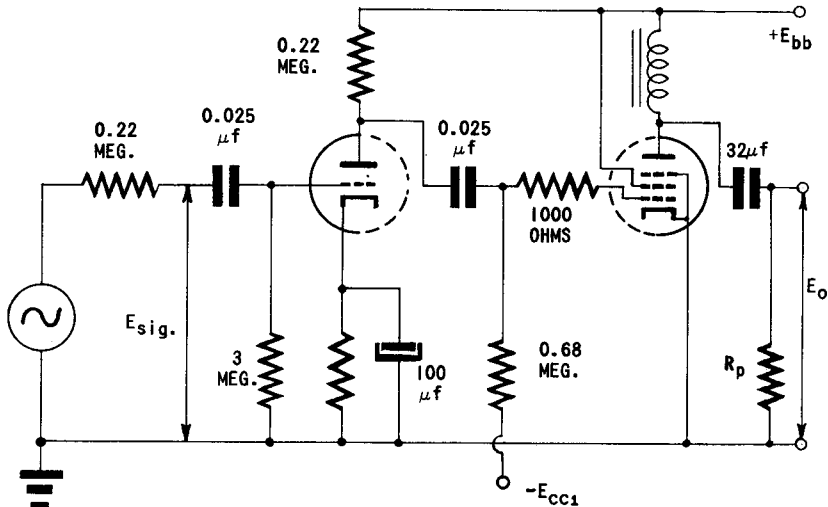
MICROPHONY AND HUM.

THE TRIODE SECTION CAN BE USED WITHOUT SPECIAL PRECAUTIONS AGAINST MICROPHONY AND HUM IN CIRCUITS WITH A 5% LOUDSPEAKER WHEN THE INPUT VOLTAGE REQUIRED FOR AN OUTPUT POWER OF 50 MWATTS OF THE OUTPUT TUBE IS HIGHER THAN 10 MVOLTS. THE A.C. VOLTAGE BETWEEN HEATER PIN 4 AND THE CATHODE SHOULD NOT EXCEED 6.3 VOLTS (RMS) IN THIS CASE AND THE GRID CIRCUIT IMPEDANCE AT 50 C/S SHOULD NOT EXCEED 0.5 MEGOHM.

→ INDICATES A CHANGE.



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CIRCUIT DIAGRAM OF TRIODE SECTION AS A.F. AMPLIFIER AND PENTODE SECTION AS TRANSFORMERLESS AUDIO OUTPUT TUBE.