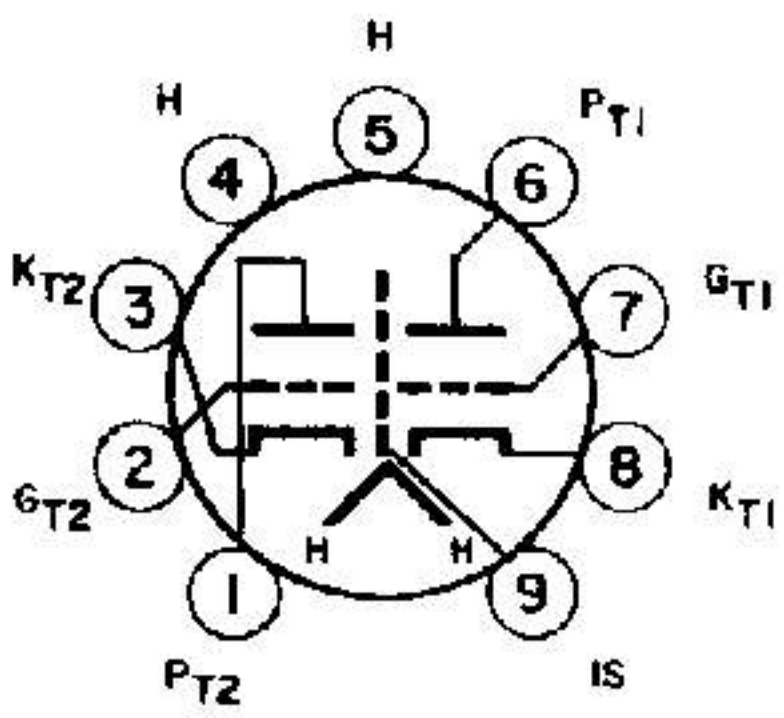


AMPEREX TUBE TYPE 6DJ8/ECC88

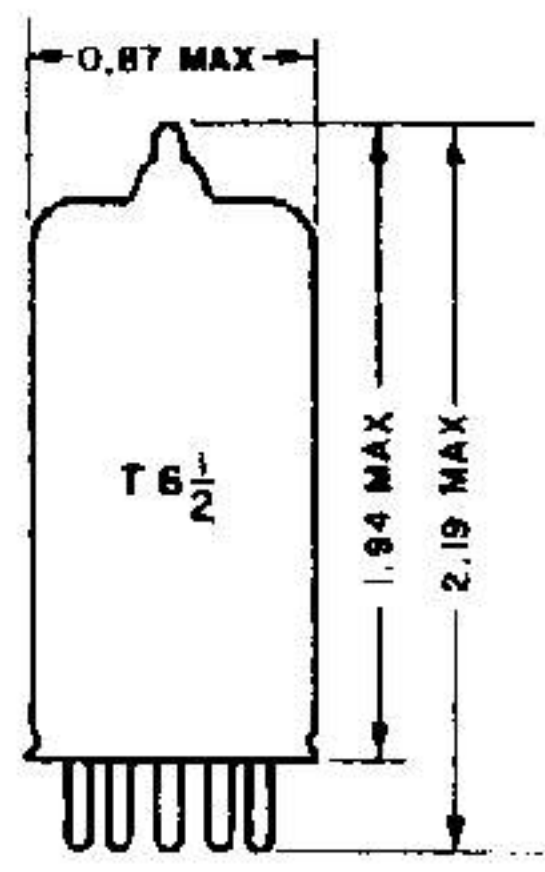
TENTATIVE DATA

The 6DJ8/ECC88 is a frame grid sharp cut-off twin triode with separate cathodes designed for use in cascode circuits, RF and IF amplifiers, mixer and phase inverter stages. The tube features high transconductance, low noise properties, as well as extreme reproducibility of characteristics as a result of the frame grid construction. The heater is designed for parallel operation from a 6.3 volt supply.



PIN CONNECTIONS

- 1. PLATE, TRIODE 2
- 2. GRID, TRIODE 2
- 3. CATHODE, TRIODE 2
- 4. HEATER
- 5. HEATER
- 6. PLATE, TRIODE 1
- 7. GRID, TRIODE 1
- 8. CATHODE, TRIODE 1
- 9. INTERNAL SHIELD



GENERAL CHARACTERISTICS

MECHANICAL

Cathode	coated, unipotential
Mounting Position	any
Dimensions	see outline drawing
Bulb	T6 1/2
Outline	6-2
Base	E9-1
Base Connection	9DE

ELECTRICAL

Heater Characteristics

Heater Arrangement	parallel supply
Heater Voltage (ac or dc)	6.3 volts
Heater Current	365 mA

6DJ8/ECC88

Direct Interelectrode Capacitances

	<u>Without External Shield</u>	<u>With External Shield</u>
<u>Grounded Input Section</u> ¹		
Plate to Grid	1.4	1.4 μf
Input Capacitance	3.3	3.3 μf
Output Capacitance	1.8	2.5 μf
→ Grid to Heater	0.13	0.13 μf
<u>Grounded Grid Output Section</u> ¹		
→ Plate to Cathode	0.18	0.16 μf
Input Capacitance	6	6 μf
→ Output Capacitance	2.8	3.7 μf
Cathode to Heater	2.7	2.7 μf
Plate to Grid	1.4	1.4 μf
<u>Between Input and Output Section</u>		
Plate of Input Section to Plate of Output Section	0.045	0.015 μf
Grid of Input Section to Plate of Output Section	0.005	0.005 μf

Maximum Ratings, Absolute Values Each Section

Plate Voltage, Cut-Off Condition	550 volts max
Plate Voltage ²	130 volts max
→ Plate Dissipation	1.8 watts max
Cathode Current	25 mA max
Negative Grid Voltage	50 volts max
Series Grid Resistor	1 megohm max
Heater-Cathode	50 volts max
→ Voltage Between Cathode of Output Section and Heater (Cathode Positive, Heater Negative)	150 volts max 130 volts max (DC component)
Cathode-Heater Resistance	20,000 ohms max

Typical Characteristics Each Section

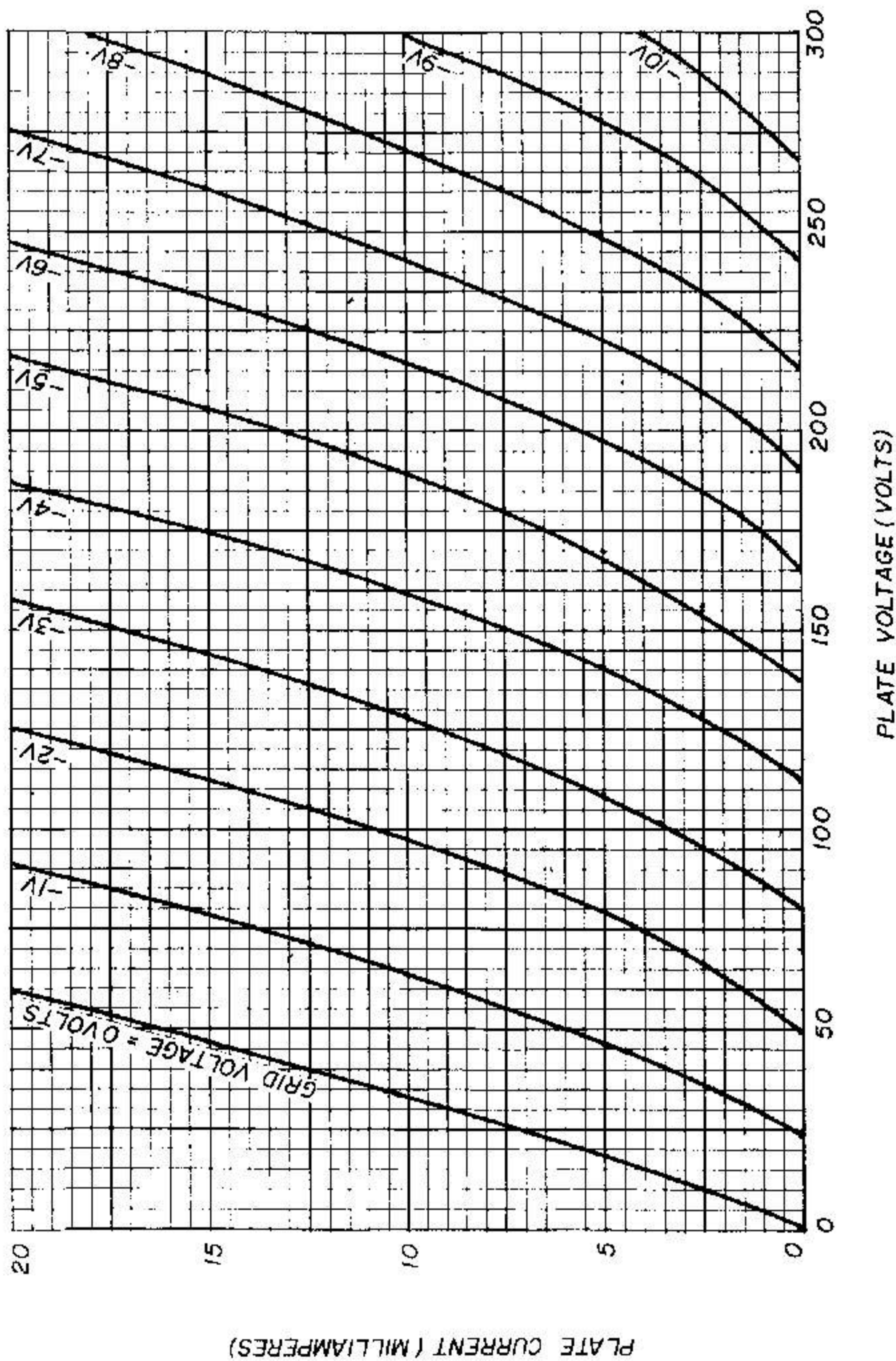
Plate Voltage	90 volts
→ Negative Grid Voltage	1.3 volts
Plate Current	15 mA
Transconductance	12,500 micromhos
Amplification Factor	33
→ Equivalent Noise Resistance	300 ohms

¹ Triode No. 1 should be used as the grounded cathode input section of the cascode amplifier and Triode No. 2 as the grounded grid output section.

² In order not to exceed the maximum permissible plate voltage when the cascode amplifier is controlled, it is necessary to use a voltage divider for the grid of the grounded grid section. With grid current biasing for the grounded cathode section the plate voltage across this section should not be more than 75 volts in the uncontrolled condition.

6DJ8/ECC88

PLATE CHARACTERISTICS



6DJ8/ECC88

PLATE CHARACTERISTICS

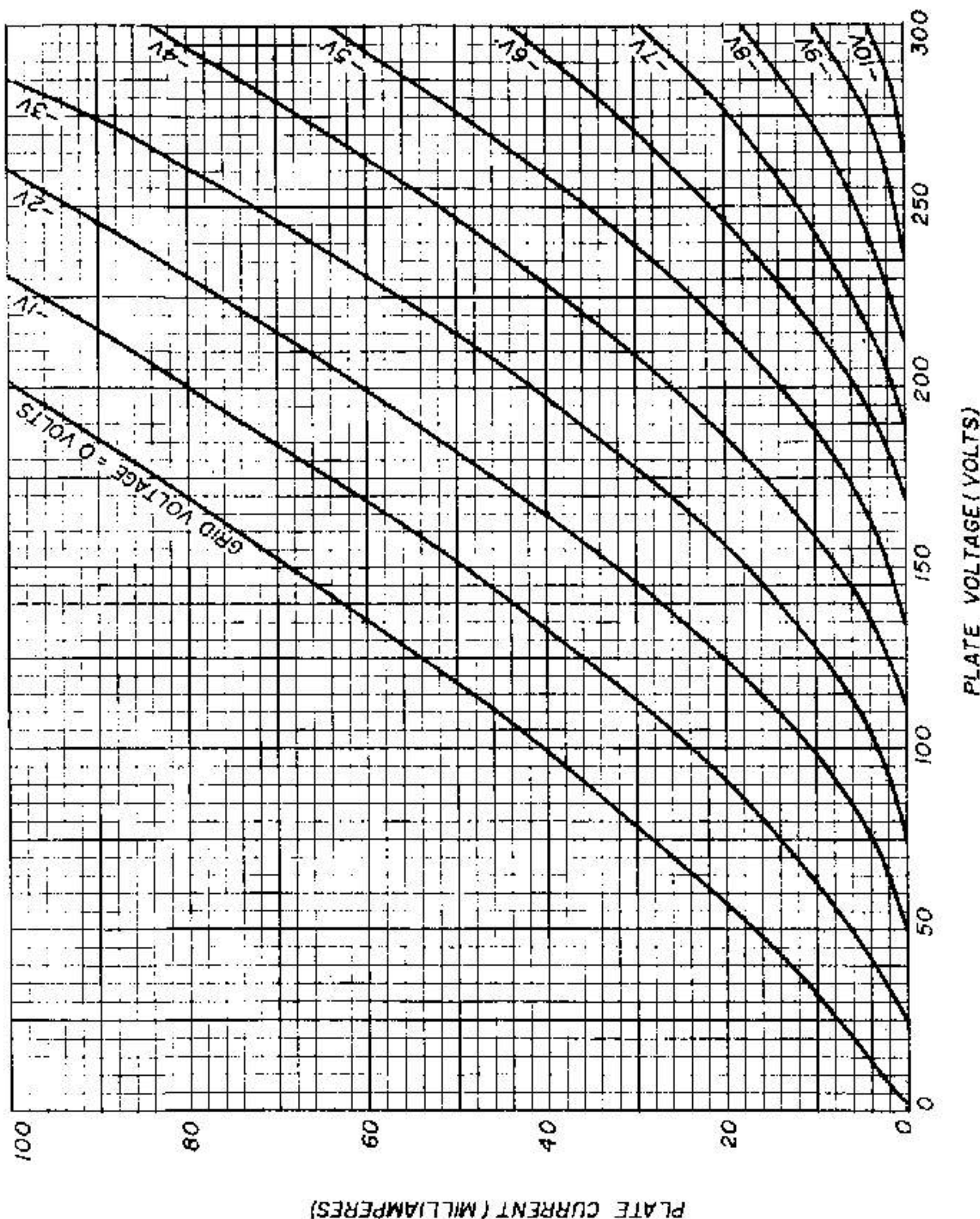


PLATE CURRENT (MILLIAMPERES)

PLATE VOLTAGE (VOLTS)

6DJ8/ECC88

TRANSFER CHARACTERISTICS

