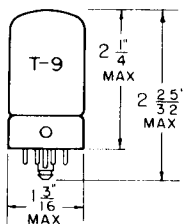


**TUNG-SOL**

PENTODE



GLASS BULB

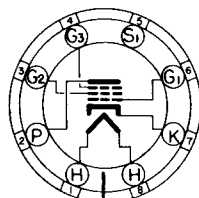
UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 450 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

LOCK-IN 8 PIN BASE

THE 7V7 IS A HEATER-CATHODE TYPE SHARP CUT-OFF PENTODE VOLTAGE AMPLIFIER USING THE LOCK-IN CONSTRUCTION. IT IS CHARACTERIZED BY HIGH TRANSCONDUCTANCE AND LOW INTERELECTRODE CAPACITANCES WHICH ADAPT IT TO USE IN WIDE-BAND HIGH FREQUENCY AMPLIFIERS.

**DIRECT INTERELECTRODE CAPACITANCES**

WITH RMA SHIELD #308 CONNECTED TO CATHODE

GRID TO PLATE: (G <sub>1</sub> TO P) MAX.	0.004	μf
INPUT: G <sub>1</sub> TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS)	9.5	μf
OUTPUT: P TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS)	6.5	μf

**RATINGS**

INTERPRETED ACCORDING TO RMA STANDARD M8-210

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM GRID #2 VOLTAGE	150	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	300	VOLTS
MINIMUM CATHODE BIAS RESISTOR	1.60	OHMS
MAXIMUM PLATE DISSIPATION	4	WATTS
MAXIMUM GRID #2 DISSIPATION	0.8	WATT

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## TUNG-SOL

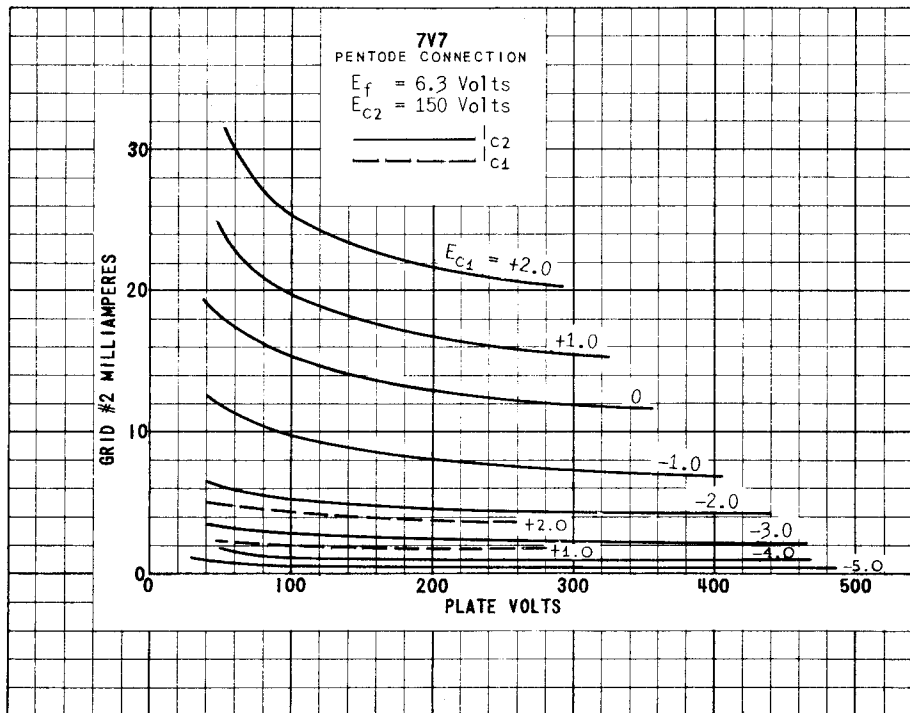
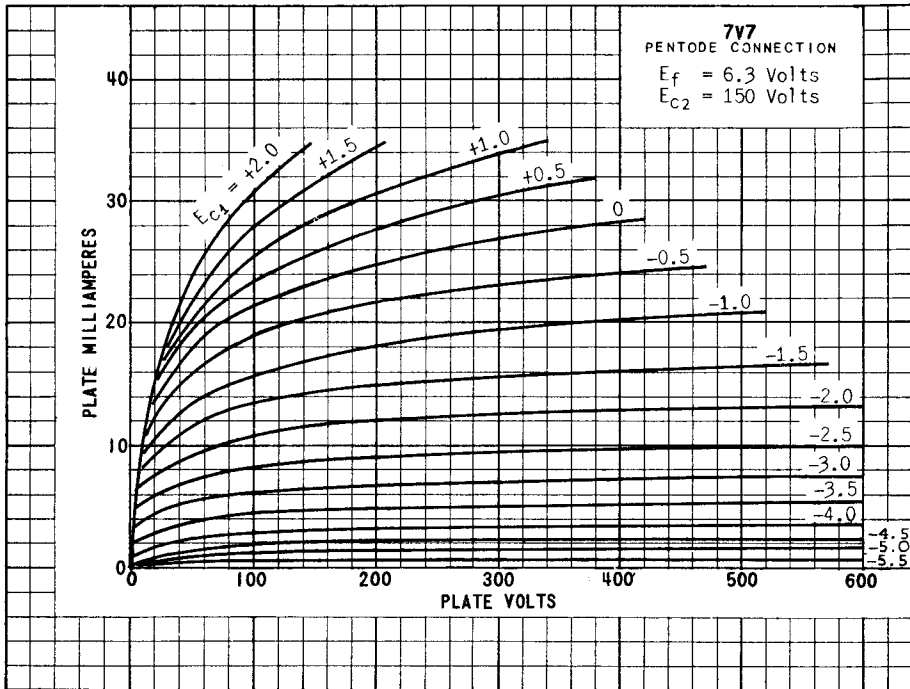
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## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

	CONDITION 1 <sup>A</sup>	CONDITION 2 <sup>B</sup>	
HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	450	450	MA.
PLATE VOLTAGE	300	300	VOLTS
GRID #3 VOLTAGE	PINS #4 AND #5 CONNECTED TO PIN #7 AT SOCKET		
GRID #2 SUPPLY VOLTAGE <sup>C</sup>	150	300	VOLTS
GRID #2 SERIES RESISTOR	---	40 000	OHMS
CATHODE BIAS RESISTOR	160	160	OHMS
PLATE RESISTANCE (APPROX.)	0.3	0.3	MEG.
TRANSCONDUCTANCE	5 800	5 800	μMHOS
PLATE CURRENT	10	10	MA.
GRID #2 CURRENT	3.9	3.9	MA.
GRID #1 VOLTAGE FOR $I_b = 10 \mu A$	-8	-16	VOLTS

<sup>A</sup> CONDITION 1 WITH FIXED SCREEN SUPPLY.<sup>B</sup> CONDITION 2 WITH SERIES SCREEN RESISTOR.<sup>C</sup> SCREEN SUPPLY VOLTAGES IN EXCESS OF 150 VOLTS REQUIRE THE USE OF A SERIES-DROPPING RESISTOR TO LIMIT THE VOLTAGE AT THE SCREEN TO 150 VOLTS WHEN THE PLATE CURRENT IS AT ITS NORMAL VALUE OF 10 MA.



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7V7

PENTODE CONNECTION

$E_f = 6.3$  Volts

$E_b = 300$  Volts

$E_{c2} = 150$  Volts

- $I_b$
- - - - -  $I_{c2}$
- $g_m$
- - - - -  $r_p$

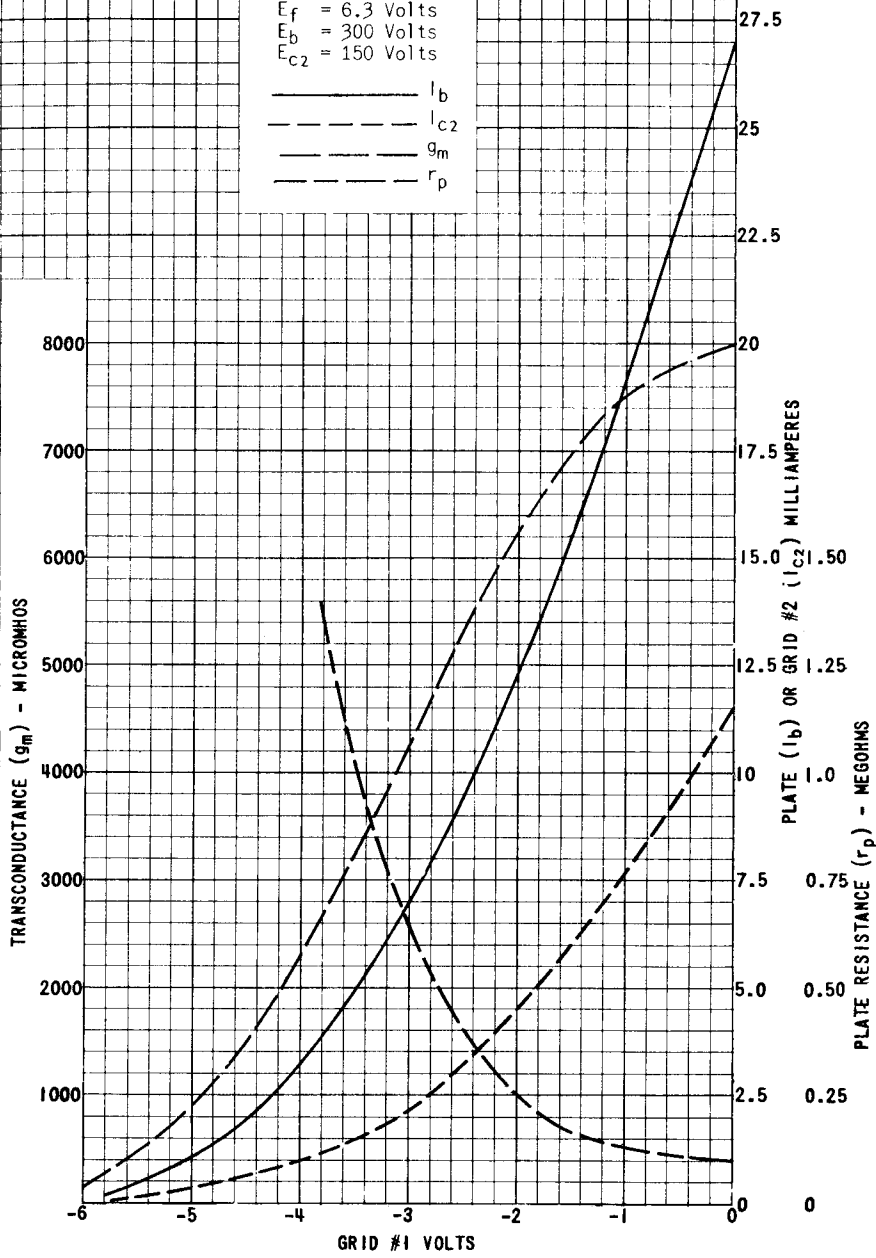


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