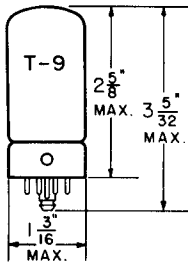


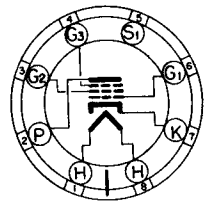
**TUNG-SOL**

**PENTODE**



**GLASS BULB**

UNIPOTENTIAL CATHODE  
 HEATER  
 6.3 VOLTS 0.6 AMPERE  
 AC OR DC  
 ANY MOUNTING POSITION



**BOTTOM VIEW**  
 LOCK-IN 8 PIN BASE

THE 7AD7 IS A HEATER-CATHODE TYPE SHARP CUT-OFF PENTODE VOLTAGE AMPLIFIER USING THE LOCK-IN CONSTRUCTION. IT IS CHARACTERIZED BY A HIGH VALUE OF TRANSCONDUCTANCE WHICH MAKES IT USEFUL IN WIDE-BAND INTERMEDIATE FREQUENCY OR VIDEO AMPLIFIERS.

**DIRECT INTERELECTRODE CAPACITANCES**

WITH RMA SHIELD NO. 308 CONNECTED TO CATHODE

GRID TO PLATE: (G <sub>1</sub> TO P) MAX.	0.03	μf
INPUT: G <sub>1</sub> TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS)	11.5	μf
OUTPUT: P TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS)	7.5	μf

**RATINGS**

INTERPRETED ACCORDING TO RMA STANDARD W8-210

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM GRID #2 VOLTAGE	300	VOLTS
MINIMUM GRID #1 VOLTAGE	0	VOLTS
MAXIMUM PLATE DISSIPATION	10	WATTS
MAXIMUM GRID #2 DISSIPATION	1.2	WATTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE (FIXED BIAS)	0.25	MEG.
MAXIMUM GRID #1 CIRCUIT RESISTANCE (SELF-BIAS)	1	MEG.

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**

**CLASS A<sub>1</sub> AMPLIFIER**

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE VOLTAGE	300	VOLTS
GRID #3 VOLTAGE		
GRID #2 VOLTAGE	150	VOLTS
GRID #1 VOLTAGE <sup>A</sup>	-3	VOLTS
SELF BIAS RESISTOR	68	OHMS
PLATE RESISTANCE (APPROX.)	0.3	MEG.
TRANSCONDUCTANCE	9 500	μMHOS
ZERO SIGNAL PLATE CURRENT	28	MA.
ZERO SIGNAL GRID #2 CURRENT	7	MA.

PINS #4 AND #5 CONNECTED TO PIN #7 AT SOCKET

<sup>A</sup>OBTAINED PREFERABLY BY SELF BIAS RESISTOR

CONTINUED ON FOLLOWING PAGE

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## TUNG-SOL

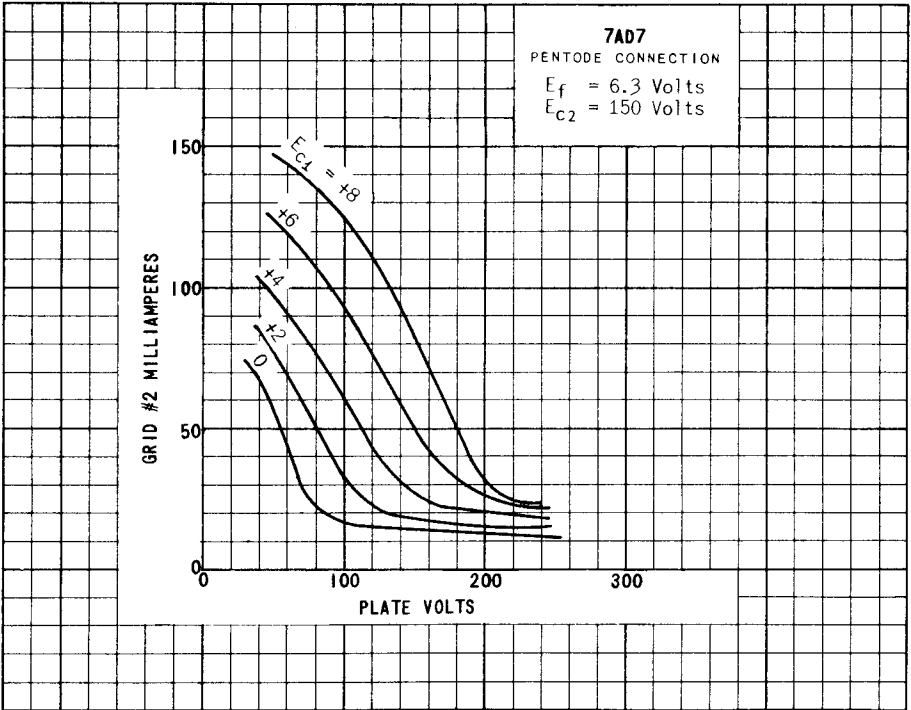
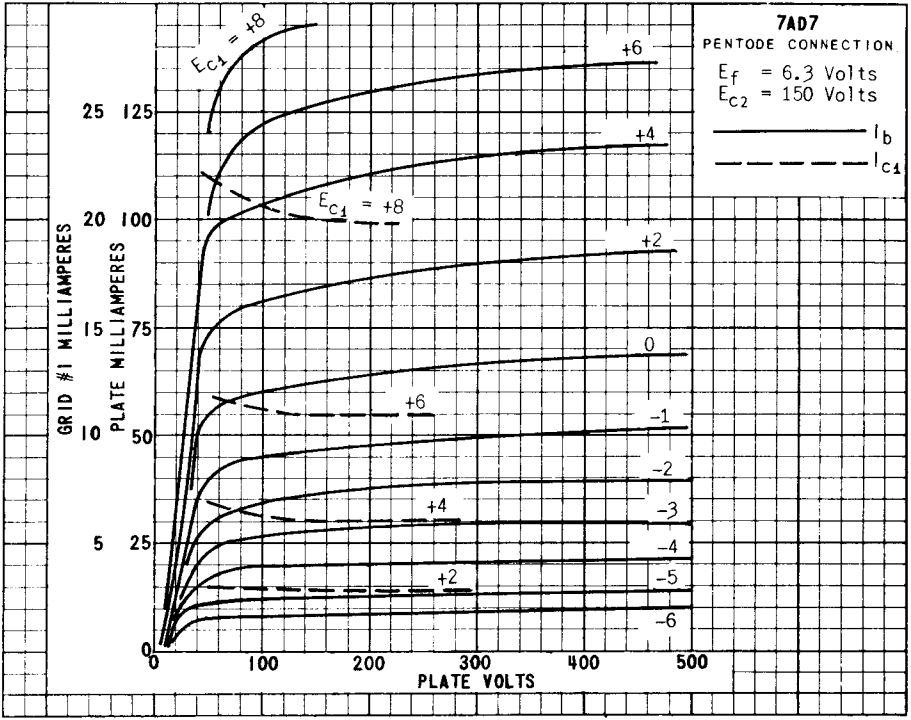
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## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> TELEVISION AMPLIFIER

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE SUPPLY VOLTAGE	300	VOLTS
GRID #3 VOLTAGE		
GRID #2 VOLTAGE	125	VOLTS
GRID #1 VOLTAGE	-3	VOLTS
SELF BIAS RESISTOR	68	OHMS
SIGNAL VOLTAGE (PEAK TO PLATE)	4	VOLTS
ZERO SIGNAL PLATE CURRENT	25	MA.
ZERO SIGNAL GRID #2 CURRENT	6	MA.
MAXIMUM SIGNAL VOLTAGE OUTPUT (PEAK TO PEAK)	135	VOLTS

PINS #4 AND #5 CONNECTED TO PIN #7 AT SOCKET



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# 7AD7

