TUNG-SOL

DOUBLE TRIODE

MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

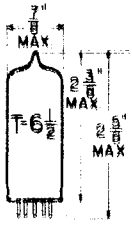
HEATER

SERIES	PARALLEL
12.6 VOLTS	6.3 VOLTS
300 MA.	600 MA.

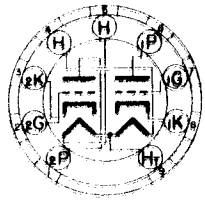
AC OR DC

FOR 12.6 VOLT OPERATION APPLY HEATER VOLTAGE BETWEEN PINS #4 AND #5. FOR 6.3 VOLT OPERATION APPLY HEATER VOLTAGE BETWEEN PIN #7 AND PINS #4 AND #5 CONNECTED TOGETHER.

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
9A

THE 12BH7 COMBINES TWO INDEPENDENT SEMI-HIGH PERVEANCE, MEDIUM-MU TRIODES IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS SUITABLE FOR USE AS A COMBINED VERTICAL DEFLECTION SWEEP GENERATOR AND DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS USING PICTURE TUBES WITH WIDE DEFLECTION ANGLES.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD[A]	WITHOUT SHIELD	
TRIODE UNIT #1			
GRID TO PLATE: (G TO P)	2.4	2.4	μμf
INPUT: G TO (H+K)	3	3	μμf
OUTPUT: P TO (H+K)	2	0.8	μμf
TRIODE UNIT #2			
GRID TO PLATE: (G TO P)	2.4	2.4	μμf
INPUT: G TO (H+K)	3	3	μμf
OUTPUT: P TO (H+K)	2.6	0.8	μμf
COUPLING: (1P TO 2P)	0.6	0.9	μμf

[A] WITH SHIELD #319 CONNECTED TO CATHODE OF UNIT UNDER TEST.

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

	CLASS A1 AMPLIFIER		VERTICAL DEFLECTION AMPLIFIER		
HEATER VOLTAGE	12.6	6.3	12.6	6.3	VOLTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE	180		180		VOLTS
MAXIMUM DC PLATE VOLTAGE	300		500		VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE	—		1 500[B]		VOLTS
MAXIMUM NEGATIVE DC GRID VOLTAGE	-50		-50		VOLTS
MAXIMUM PEAK NEGATIVE PULSE GRID VOLTAGE	—		-220[B]		VOLTS
MAXIMUM PLATE DISSIPATION (EACH UNIT)	3.5		5[B]		VOLTS
MAXIMUM DC CATHODE CURRENT (EACH UNIT)	20		20		MA.
MAXIMUM GRID CIRCUIT RESISTANCE (SELF BIAS)	2.5		2.5		MEGOHMS
MAXIMUM GRID CIRCUIT RESISTANCE (FIXED BIAS)	1		1		MEGOHM

[B] THESE RATINGS ARE ON THE ABSOLUTE MAXIMUM SYSTEM! ABSOLUTE MAXIMUM RATINGS ARE THE LIMITING VALUES ABOVE WHICH THE SERVICEABILITY OF THE TUBE MAY BE IMPAIRED FROM THE VIEWPOINT OF LIFE AND SATISFACTORY PERFORMANCE. THEREFORE, IN ORDER NOT TO EXCEED THESE ABSOLUTE RATINGS, THE EQUIPMENT DESIGNER HAS THE RESPONSIBILITY OF DETERMINING AN AVERAGE DESIGN VALUE FOR EACH RATING BELOW THE ABSOLUTE VALUE OF THAT RATING BY AN AMOUNT SUCH THAT THE ABSOLUTE VALUES WILL NEVER BE EXCEEDED UNDER ANY USUAL CONDITION OF LINE VOLTAGE VARIATION, MANUFACTURING VARIATIONS (INCLUDING COMPONENTS) IN THE EQUIPMENT ITSELF, OR ADJUSTMENTS OF CONTROLS.

CONTINUED ON FOLLOWING PAGE

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	12.6	6.3	12.6	6.3	VOLTS
HEATER CURRENT	300	600	300	600	MA.
PLATE VOLTAGE	85		250		VOLTS
GRID VOLTAGE	0		10.5		VOLTS
PLATE CURRENT (EACH UNIT)	20		11.5		VOLTS
TRANSCONDUCTANCE (EACH UNIT)	6200		3100		VOLTS
AMPLIFICATION FACTOR	21		17		
GRID VOLTAGE (APPROX.) FOR I_b = μA. AT E_b = 500	-45				VOLTS

VERTICAL DEFLECTION CIRCUIT

HEATER VOLTAGE	12.6	6.3	VOLTS
HEATER CURRENT	300	600	MA.
DC PLATE VOLTAGE	350		VOLTS
CATHODE BIAS RESISTOR (VARIABLE)	560		OHMS
GRID INPUT VOLTAGE:			
PEAK TO PEAK SAWTOOTH COMPONENT (APPROX.)	25		VOLTS
NEGATIVE PEAKING COMPONENT (APPROX.)	32		VOLTS
DC PLATE CURRENT	16		MA.
PLATE OUTPUT VOLTAGE:			
PEAK POSITIVE COMPONENT	670		VOLTS
PEAK TO PEAK SAWTOOTH COMPONENT	230		VOLTS
SWEEP HEIGHT (16RP4 OR 16TP4 TUBE WITH 14KV ON ANODE)[C]	10½		INCHES

[C] SEE CIRCUIT ON FOLLOWING PAGE.

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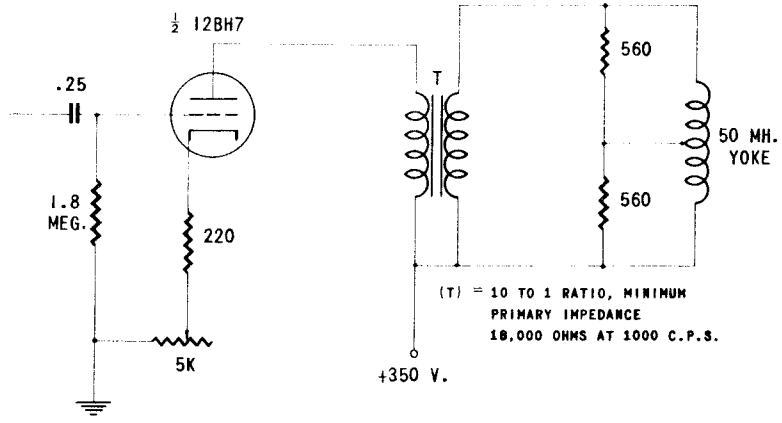

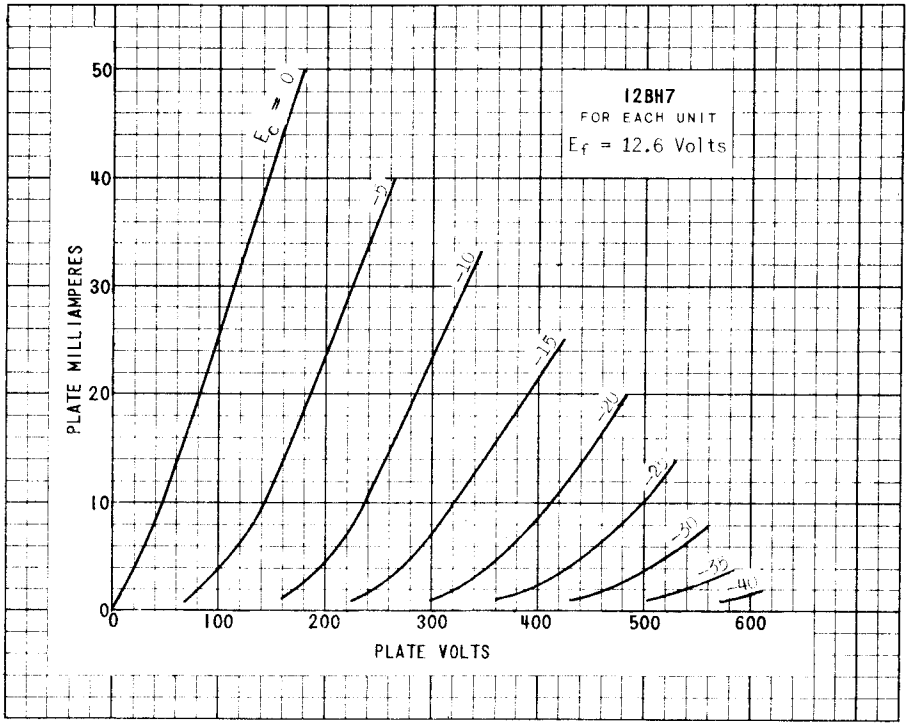

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