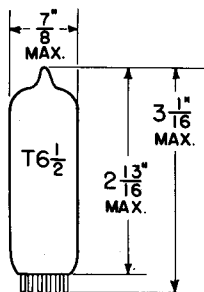


**TUNG-SOL**

**TRIODE-PENTODE**  
MINIATURE TYPE



GLASS BULB

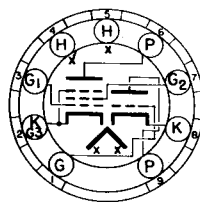
COATED UNIPOTENTIAL CATHODE

HEATER

50 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

9 EX

THE 50FY8 IS A COMBINED TRIODE AND BEAM POWER PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE IN LOW-COST STEREO SYSTEMS.

**RATINGS**

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

	TRIODE SECTION	PENTODE SECTION	
HEATER VOLTAGE		50	VOLTS
MAXIMUM PLATE VOLTAGE	150	150	VOLTS
MAXIMUM GRID #2 VOLTAGE	---	150	VOLTS
MAXIMUM PLATE DISSIPATION	1	10	WATTS
MAXIMUM GRID #2 DISSIPATION	---	3	WATTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:			
FIXED BIAS	1.0	0.5	MEGOHM
CATHODE BIAS	3.0	1.0	MEGOHM
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE TO CATHODE		200	VOLTS
HEATER POSITIVE TO CATHODE <sup>A</sup>		200	VOLTS

<sup>A</sup>DC COMPONENT NOT TO EXCEED 100 VOLTS MAXIMUM.

**TYPICAL OPERATION**

FOR ONE CHANNEL STEREO AMPLIFIER

	EACH TRIODE	PUSH-PULL PENTODES	
HEATER VOLTAGE		50	VOLTS
HEATER CURRENT		0.15	AMP.
PLATE SUPPLY VOLTAGE	125	125	VOLTS
GRID #2 SUPPLY	---	125	VOLTS
GRID #2 RESISTOR, EACH PENTODE	---	1000	OHMS
CATHODE BIAS RESISTOR	1800	62	OHMS
LOAD RESISTANCE	220,000	4000	OHMS
		(P TO P)	
REQUIRED EACH TRIODE INPUT AF VOLTAGE FOR 6.0 WATTS OUTPUT	0.3	---	VRMS
STEREO POWER OUTPUT	---	6.0	WATTS

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## TUNG-SOL

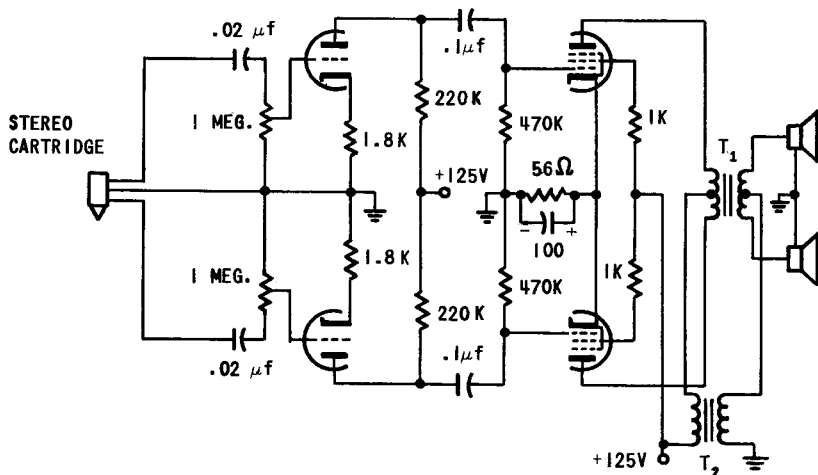
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## AVERAGE CHARACTERISTICS

CLASS A AMPLIFIER - EACH SECTION

HEATER VOLTAGE	50	VOLTS
HEATER CURRENT	0.15	AMP.
PLATE VOLTAGE	125	VOLTS
GRID #2 VOLTAGE	---	125 VOLTS
GRID #1 VOLTAGE	---	125 VOLTS
CATHODE BIAS RESISTOR	-1.5	---
PLATE RESISTANCE (APPROX.)	---	120 OHMS
TRANSCONDUCTANCE	17000	5000 OHMS
PLATE CURRENT, ZERO SIGNAL	2700	7500 $\mu$ MHOS
PLATE CURRENT, MAXIMUM SIGNAL	2.5	70 MA.
GRID #2 CURRENT, ZERO SIGNAL	---	66 MA.
GRID #2 CURRENT, MAXIMUM SIGNAL	---	10 MA.
LOAD RESISTANCE	---	19 MA.
POWER OUTPUT AT 10% DISTORTION	---	2000 OHMS
AMPLIFICATION FACTOR	46	3 WATTS

## TWO TUBE 6 WATT STEREO AMPLIFIER

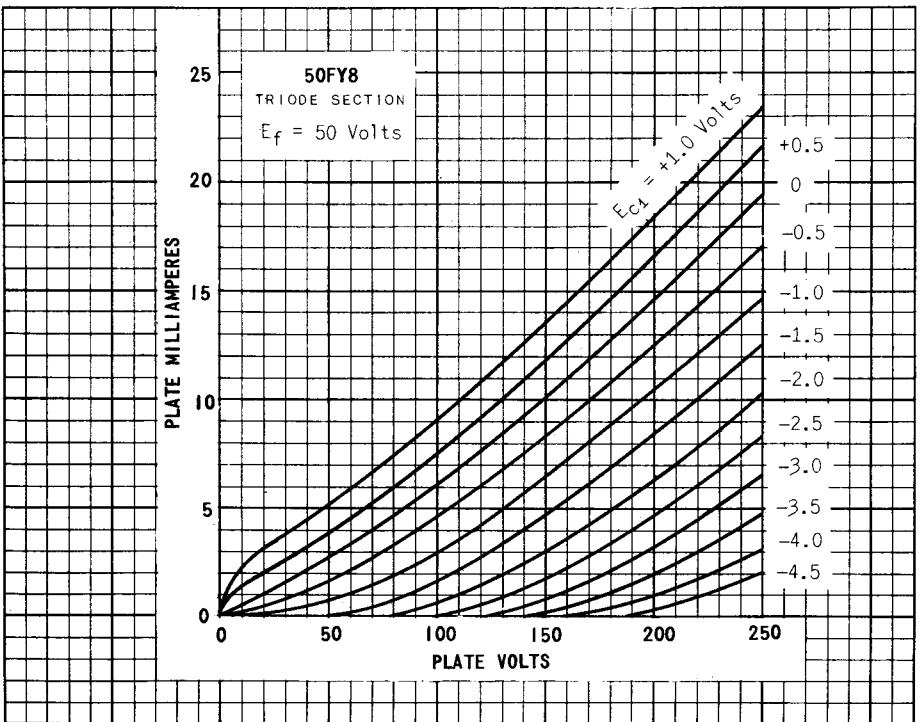
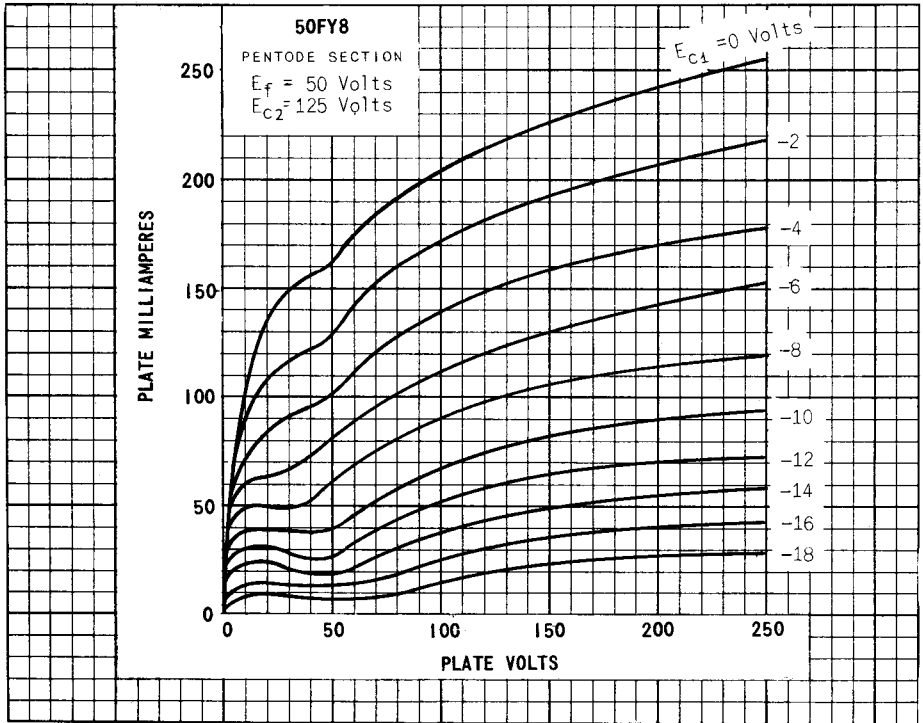


$T_1$  - Primary = 4000  $\Omega$  C.T.

- Secondary (One side to C.T.) = Voice Coil Impedance of One Speaker

$T_2$  - Primary = 1000  $\Omega$

- Secondary = 1/2 Voice Coil Impedance of One Speaker



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