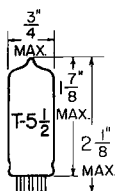


TUNG-SOL

PENTODE

MINIATURE TYPE



GLASS BULB

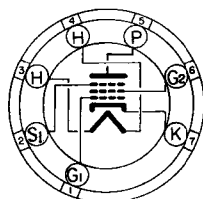
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.3 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
7 PIN BASE

78K

THE 6AU6 AND 6AU6A ARE PENTODE AMPLIFIERS HAVING A SHARP CUTOFF CONTROL CHARACTERISTIC. WITH HIGH TRANSCONDUCTANCE AND LOW GRID TO PLATE CAPACITANCE THEY ARE INTENDED FOR SERVICE AS EITHER RF OR AF AMPLIFIERS. IN ADDITION, THERMAL CHARACTERISTICS OF THE HEATER OF THE 6AU6A ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED. EXCEPT FOR THE CONTROLLED HEATER WARM-UP TIME AND HIGHER HEATER-CATHODE VOLTAGE RATINGS OF THE 6AU6A, THE TWO TUBES ARE IDENTICAL.

DIRECT INTERELECTRODE CAPACITANCES

PENTODE CONNECTION:

GRID TO PLATE: (G_4 TO P) MAX.INPUT: G_4 TO (H+K+ G_2 + G_3 &1S)OUTPUT: P TO (H+K+ G_2 + G_3 &1S)WITH
SHIELD^A

0.003

5.5

5

WITHOUT
SHIELD

0.003

5.5

5

 μf μf μf

TRIODE CONNECTION:

GRID TO PLATE: G_4 TO (P+ G_2 + G_3 &1S)INPUT: G_4 TO (H+K)OUTPUT: (P+ G_2 + G_3 &1S) TO (H+K)

2.6

3.2

8.5

2.6

3.2

1.2

 μf μf μf ^A SHIELD #316 CONNECTED TO PIN #7.

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

	TRIODE CONNECTION ^B	PENTODE CONNECTION	
HEATER VOLTAGE	6.3	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE: ^D			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC	100	100	VOLTS
TOTAL DC AND PEAK	200	200	VOLTS
MAXIMUM PLATE VOLTAGE	250	300	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	PLATE	300	VOLTS
MAXIMUM GRID #2 VOLTAGE	PLATE	SEE J5-C4	
MAXIMUM GRID #3 VOLTAGE PIN #2 CONNECTED TO:	PLATE	CATHODE	
MAXIMUM PLATE DISSIPATION	3.2	3	WATTS
MAXIMUM GRID #2 DISSIPATION	---	0.65	WATTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	0	VOLTS
HEATER WARM-UP TIME (APPROX.)* (6AU6A)		11.0	SECONDS

^B TRIODE CONNECTION: G_2 AND G_3 CONNECTED TO PLATE.

* HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

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TUNG-SOL

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

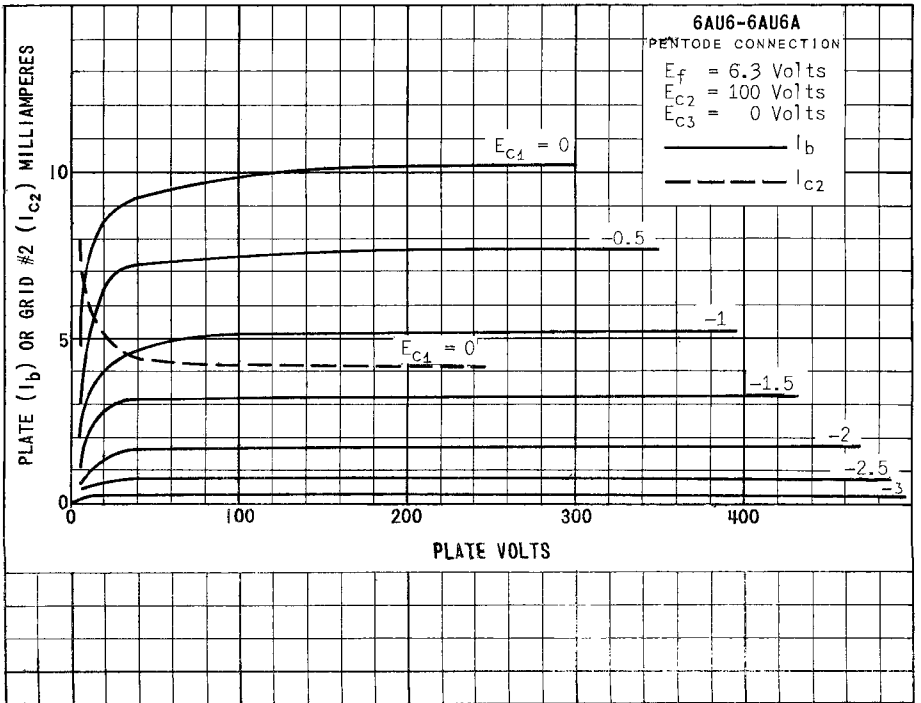
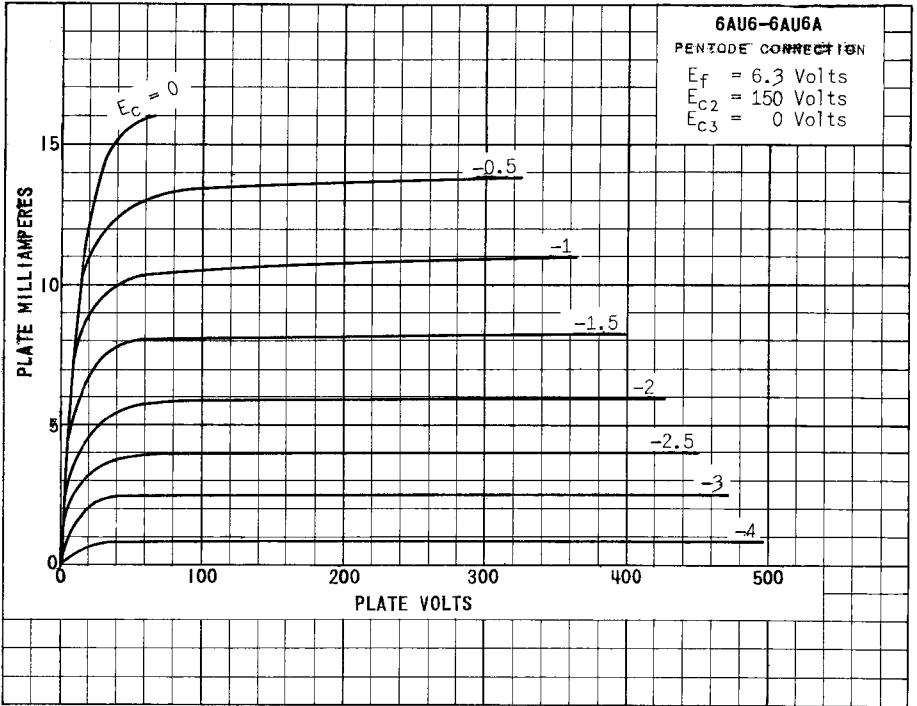
CLASS A₁ AMPLIFIER - PENTODE CONNECTION

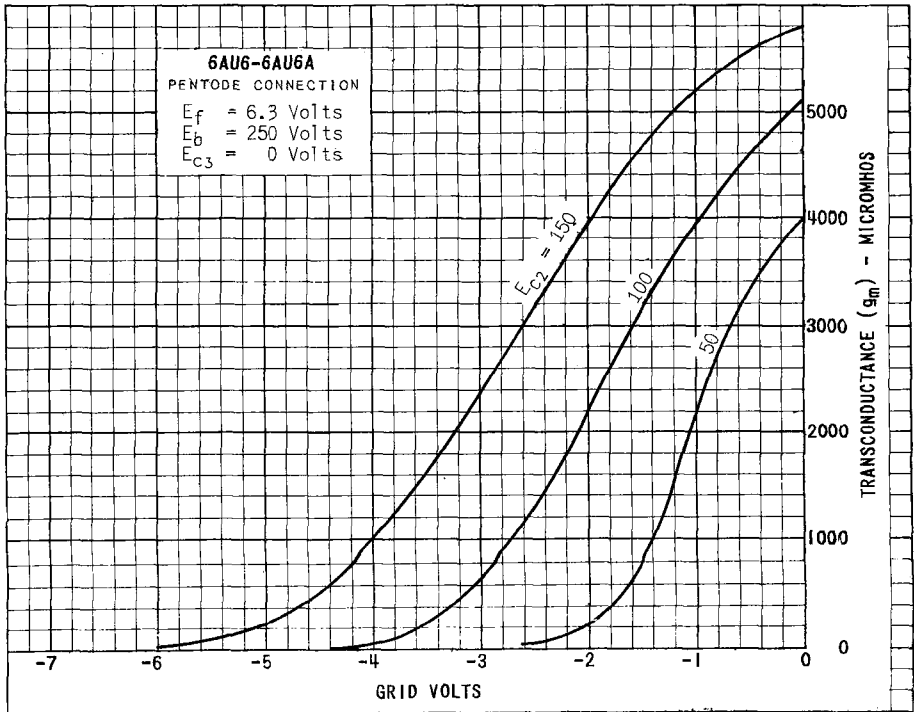
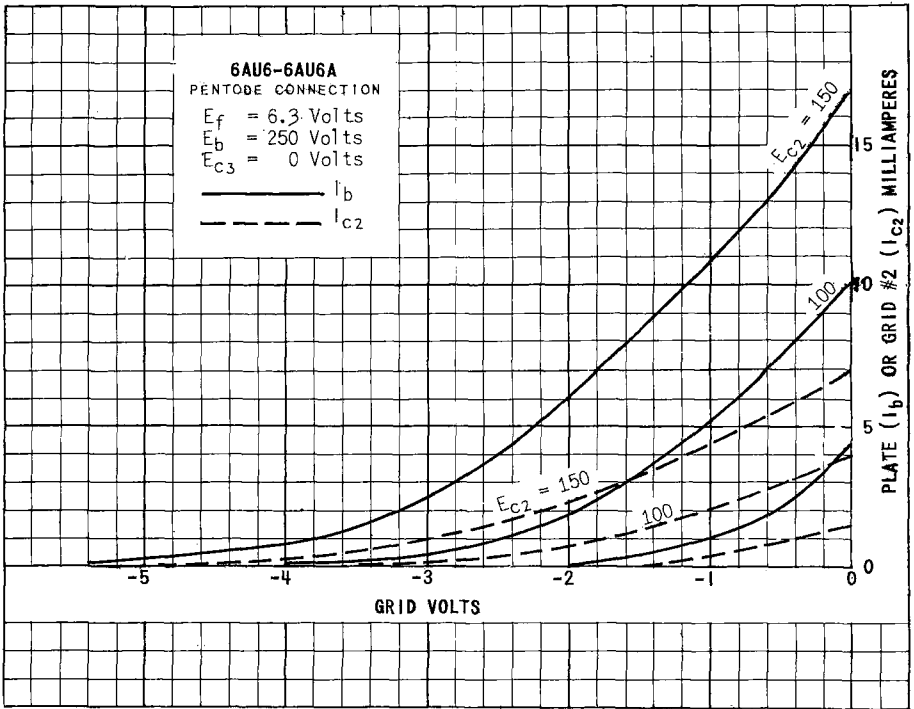
HEATER VOLTAGE	6.3	6.3	6.3	VOLTS
HEATER CURRENT	0.3	0.3	0.3	AMP.
PLATE VOLTAGE	100	250	250	VOLTS
GRID #2 VOLTAGE	100	125	150	VOLTS
CATHODE BIAS RESISTOR	150	100	68	OHMS
GRID #3 VOLTAGE	PIN #2 CONNECTED TO PIN #7 AT SOCKET			
TRANSCONDUCTANCE	3 900	4 500	5 200	μMHOS
PLATE CURRENT	5	7.6	10.6	MA.
GRID #2 CURRENT	2.1	3	4.3	MA.
PLATE RESISTANCE (APPROX.)	0.5	1.5	1	MEG OHMS
GRID #4 VOLTAGE (APPROX.) FOR $I_b = 10 \mu A$.	-4.2	-5.5	-6.5	VOLTS

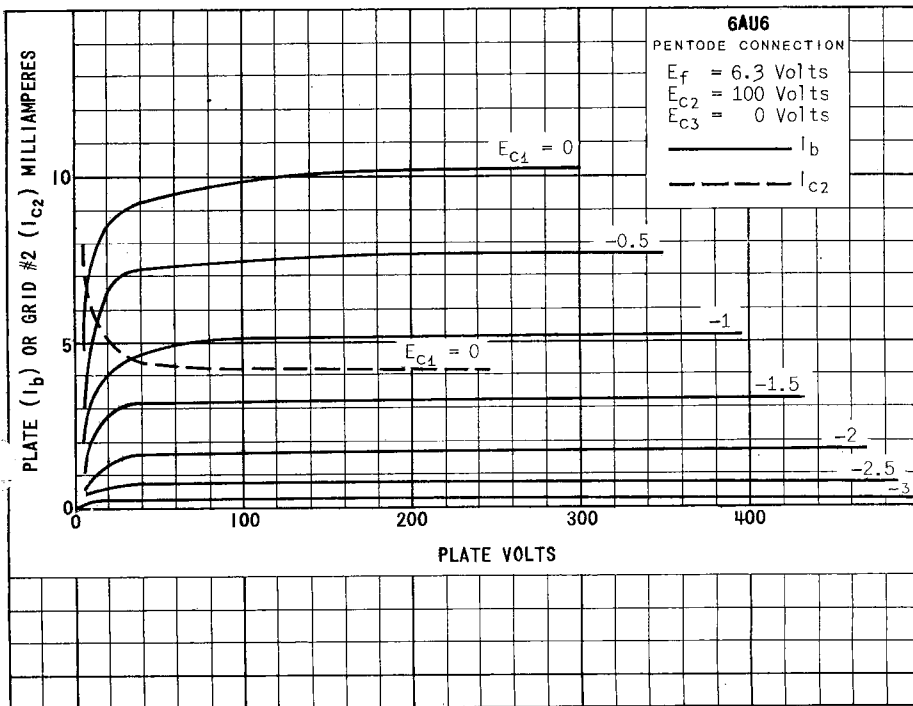
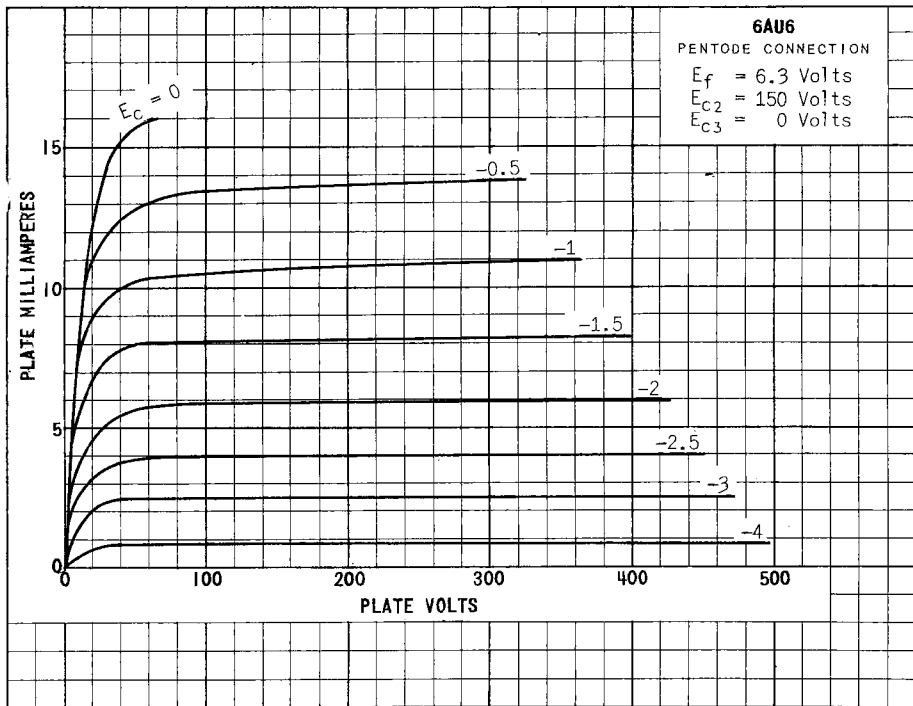
CLASS A₁ AMPLIFIER - TRIODE CONNECTION^C

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.3	AMP.
PLATE VOLTAGE	250	VOLTS
GRID #2 VOLTAGE	PLATE	
CATHODE RESISTOR	330	OHMS
GRID #3 VOLTAGE	PLATE	
TRANSCONDUCTANCE	4 800	μMHOS
PLATE CURRENT	12.2	MA.
AMPLIFICATION FACTOR	36	

^C TRIODE CONNECTION: GRID #2 AND GRID #3 CONNECTED TO PLATE.^D 6AU6: HEATER NEGATIVE WITH RESPECT TO CATHODE 180 Volts
HEATER POSITIVE WITH RESPECT TO CATHODE 100 Volts







6AU6 (12AU6)

