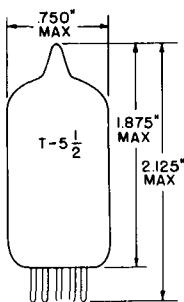


TUNG-SOL



GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2

PENTODE MINIATURE TYPE

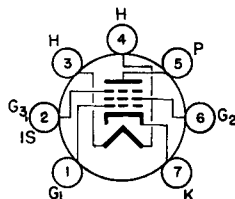
COATED UNIPOTENTIAL CATHODE

HEATER

12.6±1.3 VOLTS 150 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 78K

THE 12AU6 IS A PENTODE AMPLIFIER HAVING A SHARP CUT-OFF CONTROL CHARACTERISTIC USING THE MINIATURE CONSTRUCTION. WITH HIGH TRANSCONDUCTANCE, LOW GRID-PLATE CAPACITANCE, IT IS INTENDED FOR SERVICE AS EITHER AN RF OR AF AMPLIFIER.

DIRECT INTERELECTRODE CAPACITANCES

PENTODE CONNECTION:

GRID TO PLATE: (G_1 TO P) MAX.INPUT: G_1 TO (H+K+ G_2 + G_3 +IS)OUTPUT: P TO (H+K+ G_2 + G_3 +IS)WITH
SHIELD^A

.0035

5.5

5

WITHOUT
SHIELD

.0035

5.5

5

pf

pf

pf

TRIODE CONNECTION:

GRID TO PLATE: G_1 TO (P+ G_2 + G_3 +IS)INPUT: G_1 TO (H+K)OUTPUT: (P+ G_2 + G_3 +IS) TO (H+K)

2.6

3.2

9.5

2.6

3.2

1.7

pf

pf

pf

^A SHIELD #316 CONNECTED TO PIN #7.

→ MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

TRIODE CONNECTION^C PENTODE CONNECTION

MAXIMUM HEATER-CATHODE VOLTAGE:

HEATER NEGATIVE WITH RESPECT TO CATHODE

HEATER POSITIVE WITH RESPECT TO CATHODE

MAXIMUM PLATE VOLTAGE

MAXIMUM GRID #2 SUPPLY VOLTAGE

MAXIMUM GRID #2 VOLTAGE

MAXIMUM GRID #3 VOLTAGE PIN #2 CONNECTED TO:

MAXIMUM PLATE DISSIPATION

MAXIMUM GRID #2 DISSIPATION

MAXIMUM GRID #2 INPUT:*

FOR GRID #2 VOLTAGES UP TO 165 VOLTS

FOR GRID #2 VOLTAGES BETWEEN 165 VOLTS

AND 330 VOLTS *

MAXIMUM POSITIVE DC GRID #1 VOLTAGE

200

200*

275

3.5

0

200

200*

330

330

SEE J5-C4-2

CATHODE

3.5

0.75

SEE J5-C4-2

0

VOLTS

VOLTS

VOLTS

VOLTS

WATTS

WATTS

WATTS

WATT

VOLTS

WATT

VOLTS

VOLTS

→ INDICATES A CHANGE.

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER - PENTODE CONNECTION

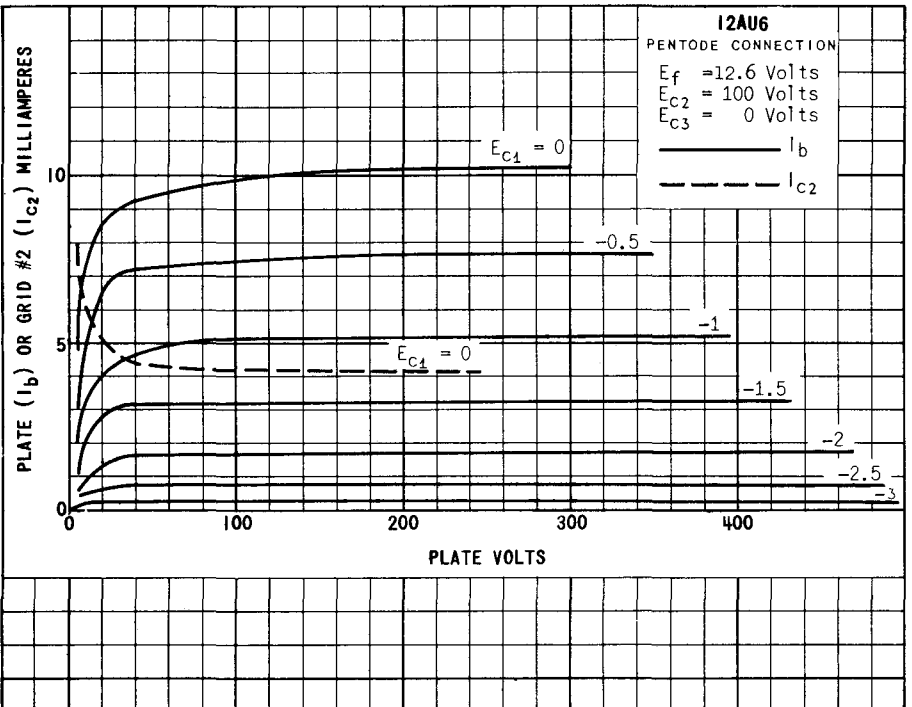
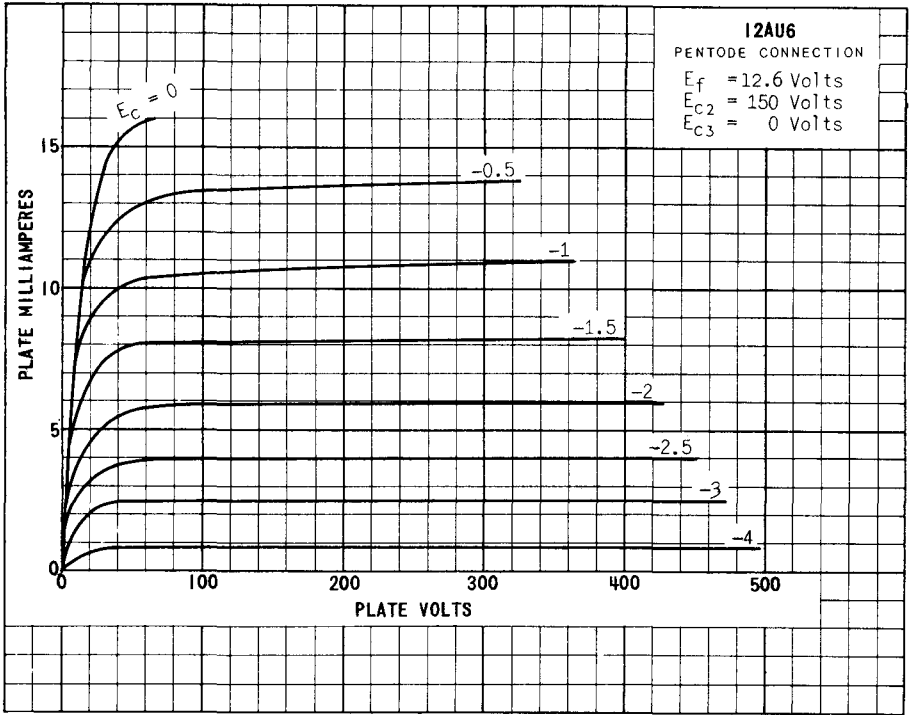
PLATE VOLTAGE	100	250	250	VOLTS
GRID #2 VOLTAGE	100	125	150	VOLTS
CATHODE BIAS RESISTOR	150	100	68	OHMS
GRID #3 VOLTAGE	PIN #2 CONNECTED TO PIN #7 AT SOCKET			
TRANSCONDUCTANCE	3 900	4 500	5 200	μMHOS
PLATE CURRENT	5	7.6	10.6	MA.
GRID #2 CURRENT	2.1	3	4.3	MA.
PLATE RESISTANCE (APPROX.)	0.5	1.5	1	MEGOHMS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

CLASS A₁ AMPLIFIER - TRIODE CONNECTION^C

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.

• THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.



12AU6 (6AU6)

