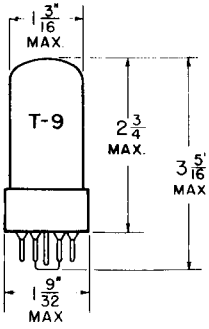
TUNG-SOL

BEAM PENTODE

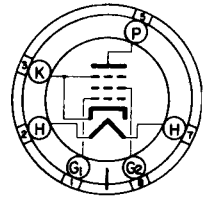


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 1.25 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
SHORT INTERMEDIATE SHELL 6 PIN OCTAL
6CK

THE 6AU5GT IS A HIGH PERVEANCE SINGLE-ENDED, BEAM POWER AMPLIFIER DESIGNED FOR USE AS A HORIZONTAL-DEFLECTION AMPLIFIER IN LOW-COST, HIGH EFFICIENCY DEFLECTION CIRCUITS OF TELEVISION RECEIVERS. IT IS PARTICULARLY EFFECTIVE WHEN THE PLATE SUPPLY POTENTIAL IS LIMITED.

DIRECT INTERELECTRODE CAPACITANCES

GRID #1 TO PLATE: (G_1 TO P)	0.5	μμf
INPUT: G_1 TO (H+K+G_2+G_3)	11.3	μμf
OUTPUT: P TO (H+K+G_2+G_3)	7.0	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER[A]

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE:		
TOTAL DC AND PEAK	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE:		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM DC PLATE SUPPLY VOLTAGE (BOOST + POWER SUPPLY)	550	VOLTS
MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABSOLUTE MAXIMUM)	5 500	VOLTS
MAXIMUM PEAK NEGATIVE PLATE VOLTAGE	1 250	VOLTS
MAXIMUM PLATE DISSIPATION[B]	10	WATTS
MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE	300	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	200	VOLTS
MAXIMUM GRID #2 DISSIPATION	2.5	WATTS
MAXIMUM AVERAGE CATHODE CURRENT	110	MA.
MAXIMUM PEAK CATHODE CURRENT	400	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	0.47	MEGOHM
MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)	210°	CENTIGRADE

[A] FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE VOLTAGE PULSE NOT TO EXCEED 15 PERCENT OF A SCANNING CYCLE.

[B] IN STAGES OPERATING WITH GRID-LEAK BIAS, AN ADEQUATE CATHODE BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

CONTINUED ON FOLLOWING PAGE

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	1.25	AMP.
PENTODE OPERATION:[C]		
PLATE CURRENT	60	MA.
GRID #2 CURRENT	6.8	MA.
TRANSCONDUCTANCE	5 600	µMHOS
PLATE RESISTANCE	6 000	OHMS
ZERO-BIAS:[D]		
PLATE CURRENT	210	MA.
GRID #2 CURRENT	25	MA.
CUT-OFF:[E]		
GRID #1 VOLTAGE (APPROX.)	-45	VOLTS
TRIODE AMPLIFICATION FACTOR[F]	5.9	

[C] WITH E_b = 115 VOLTS, E_{C2} = 175 VOLTS AND E_{C1} = -20 VOLTS

[D] WITH E_b = 60 VOLTS AND E_{C2} = 175 VOLTS.

[E] FOR I_b = 1 MA. WITH E_b = 115 VOLTS AND E_{C2} = 150 VOLTS.

[F] WITH E_b = E_{C2} = 100 VOLTS AND E_{C1} = -4.5 VOLTS

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

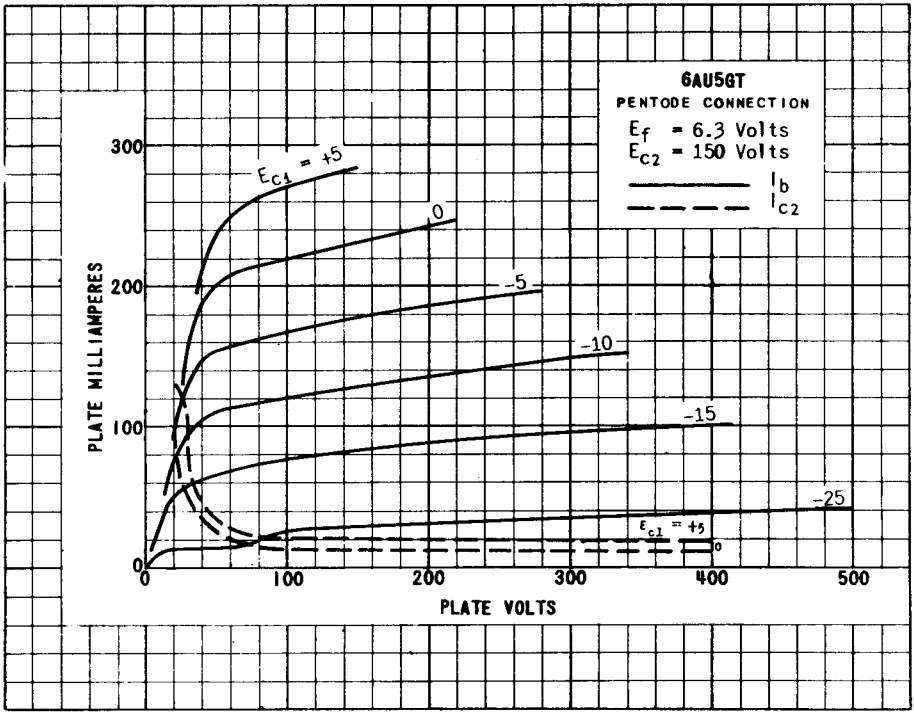
VOLTAGE REGULATOR SERVICE

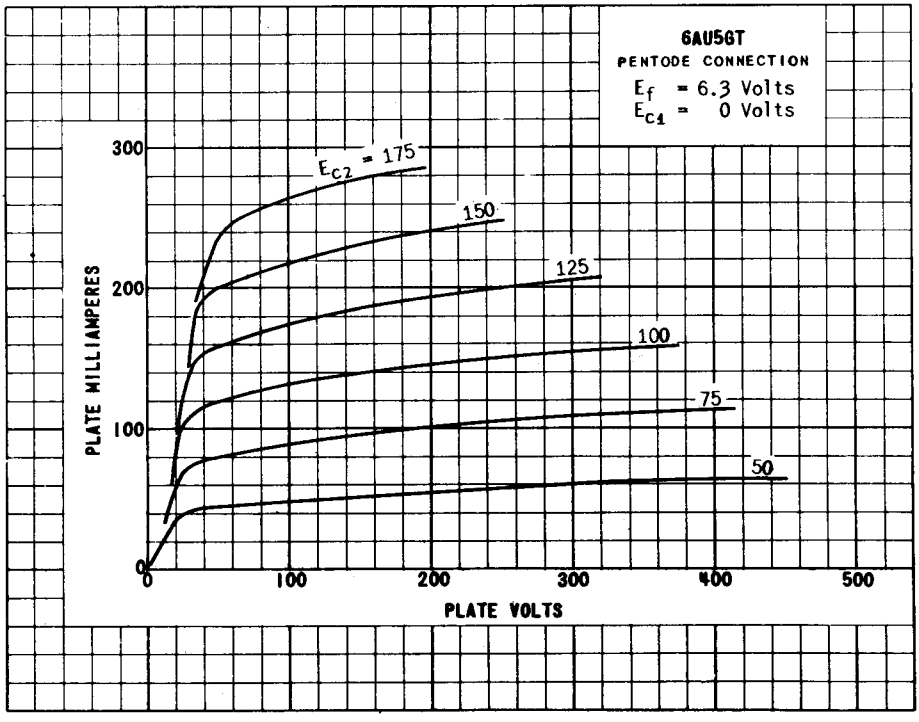
TRIODE CONNECTION--GRID NO. 2 CONNECTED TO PLATE

MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
NEGATIVE BIAS VALUE	125	VOLTS
POSITIVE BIAS VALUE	0	VOLTS
MAXIMUM CATHODE CURRENT	110	MA.
MAXIMUM TOTAL PLATE & GRID #2 DISSIPATION	10	WATTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200[A]	VOLTS

[A] THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

* INDICATES AN ADDITION.





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