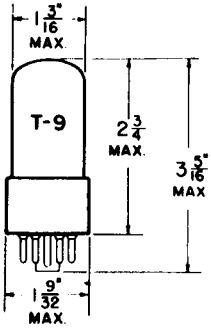
TUNG-SOL

PENTODE

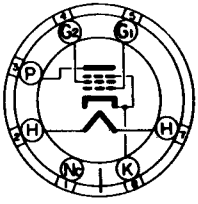


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.4 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
INTERMEDIATE SHELL
7 PIN OCTAL
7S

THE 6K6GT IS AN INDIRECTLY HEATED CATHODE TYPE POWER AMPLIFIER PENTODE DESIGNED FOR SERVICE IN THE OUTPUT STAGES OF AC, AC/DC AND STORAGE BATTERY OPERATED RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

GRID TO PLATE: (G_1 TO P)	0.5	μμf
INPUT: G_1 TO (H+K+G_2+G_3)	5.5	μμf
OUTPUT: P TO (H+K+G_2+G_3)	6.0	μμf

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD M8-210

	CLASS A_1 AMPLIFIER	VERTICAL DEFLECTION AMPLIFIER[AB]	
HEATER VOLTAGE	6.3	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:			
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	315	315	VOLTS
MAXIMUM GRID #2 VOLTAGE	285	---	VOLTS
MAXIMUM PEAK POSITIVE VOLTAGE (ABSOLUTE MAXIMUM)	---	1 200	VOLTS
MAXIMUM PLATE DISSIPATION[C]	8.5	7	WATTS
MAXIMUM GRID #2 DISSIPATION	2.8	---	WATTS
MAXIMUM PEAK NEGATIVE GRID VOLTAGE	---	250	VOLTS
MAXIMUM AVERAGE CATHODE CURRENT	---	25	MA.
MAXIMUM PEAK CATHODE CURRENT	---	75	MA.
MAXIMUM GRID CIRCUIT RESISTANCE:			
FIXED BIAS OPERATION	0.1	---	MEGOHM
CATHODE BIAS OPERATION	0.5	2.2	MEGOHMS

[A] TRIODE CONNECTION.

[B] 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.

[C] 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

→ INDICATES A CHANGE OR ADDITION.

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER – SINGLE TUBE

HEATER VOLTAGE	6.3	6.3	6.3	VOLTS
HEATER CURRENT	0.4	0.4	0.4	AMP.
PLATE VOLTAGE	100	250	315	VOLTS
GRID #2 VOLTAGE	100	250	250	VOLTS
GRID #1 VOLTAGE	-7	-18	-21	VOLTS
PEAK AF GRID #1 VOLTAGE	7	18	21	VOLTS
ZERO-SIGNAL PLATE CURRENT	9	32	25.5	MA.
MAXIMUM-SIGNAL PLATE CURRENT	9.5	33	28	MA.
ZERO-SIGNAL GRID #2 CURRENT	1.6	5.5	4.0	MA.
MAXIMUM-SIGNAL GRID #2 CURRENT	3	10	9	MA.
PLATE RESISTANCE (APPROX.)	104 000	90 000	110 000	OHMS
TRANSCONDUCTANCE	1 500	2 300	2 100	µMHOS
LOAD RESISTANCE	12 000	7 600	9 000	OHMS
MAXIMUM-SIGNAL POWER OUTPUT	0.35	3.4	4.5	WATTS
TOTAL HARMONIC DISTORTION (APPROX.)	11	11	15	PERCENT

CLASS A_1 AMPLIFIER – PUSH-PULL[D]

	FIXED BIAS	CATHODE BIAS	
HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	0.4	0.4	AMP.
PLATE VOLTAGE	235	285	VOLTS
GRID #2 VOLTAGE	285	285	VOLTS
GRID #1 VOLTAGE	-25.5	---	VOLTS
CATHODE RESISTOR	---	400	OHMS
PEAK AF GRID #1 TO GRID #1 VOLTAGE	51	51	VOLTS
ZERO-SIGNAL PLATE CURRENT	55	55	MA.
MAXIMUM-SIGNAL PLATE CURRENT	72	61	MA.
ZERO-SIGNAL GRID #2 CURRENT	9	9	MA.
MAXIMUM-SIGNAL GRID #2 CURRENT	17	13	MA.
PLATE-TO-PLATE LOAD RESISTANCE	12 000	12 000	OHMS
MAXIMUM-SIGNAL POWER OUTPUT	10.5	9.8	WATTS
TOTAL HARMONIC DISTORTION	6	4	PERCENT

[D] UNLESS OTHERWISE SPECIFIED, VALUES ARE FOR TWO TUBES.

CLASS A_1 AMPLIFIER – TRIODE CONNECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.4	AMP.
PLATE VOLTAGE	250	VOLTS
GRID VOLTAGE	-18	VOLTS
PLATE CURRENT	37.5	MA.
TRANSCONDUCTANCE	2 700	µMHOS
AMPLIFICATION FACTOR	6.8	
PLATE RESISTANCE (APPROX.)	2 500	OHMS
GRID VOLTAGE FOR I_b = 0.5 MA. (APPROX.)	-48	VOLTS

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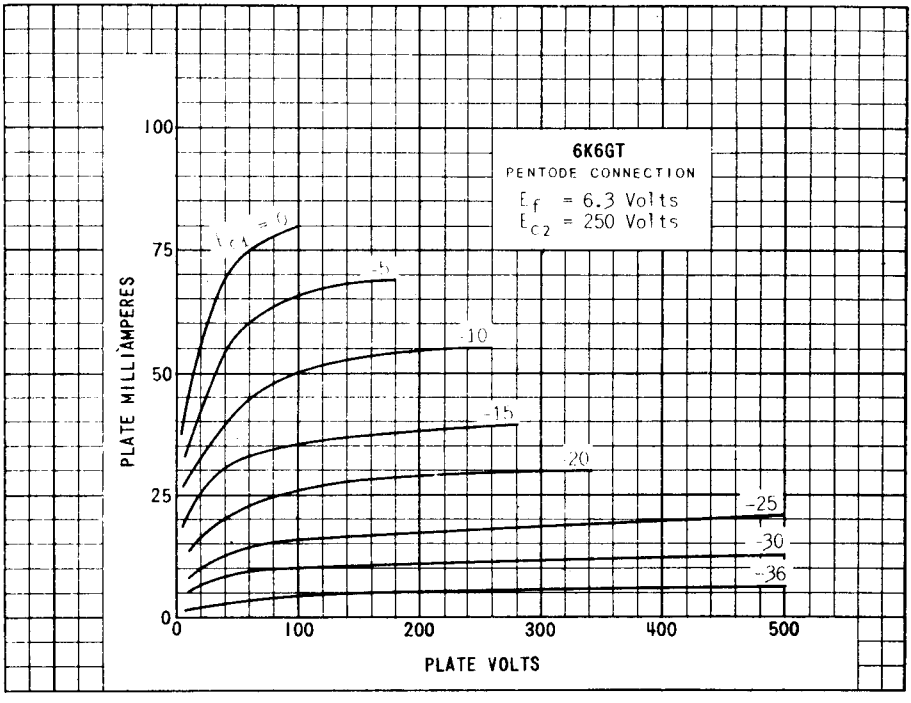
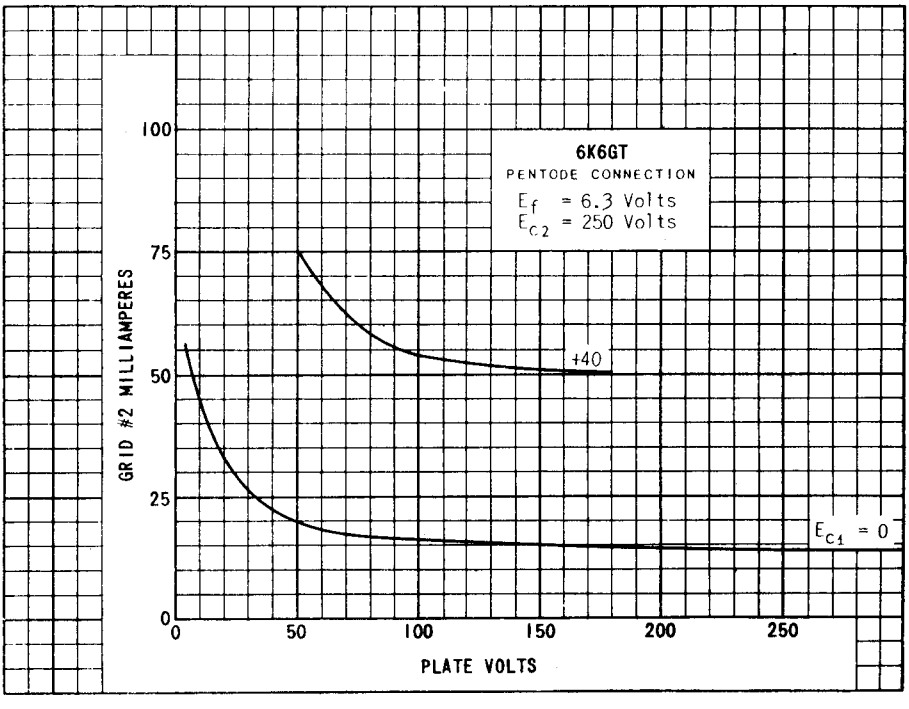
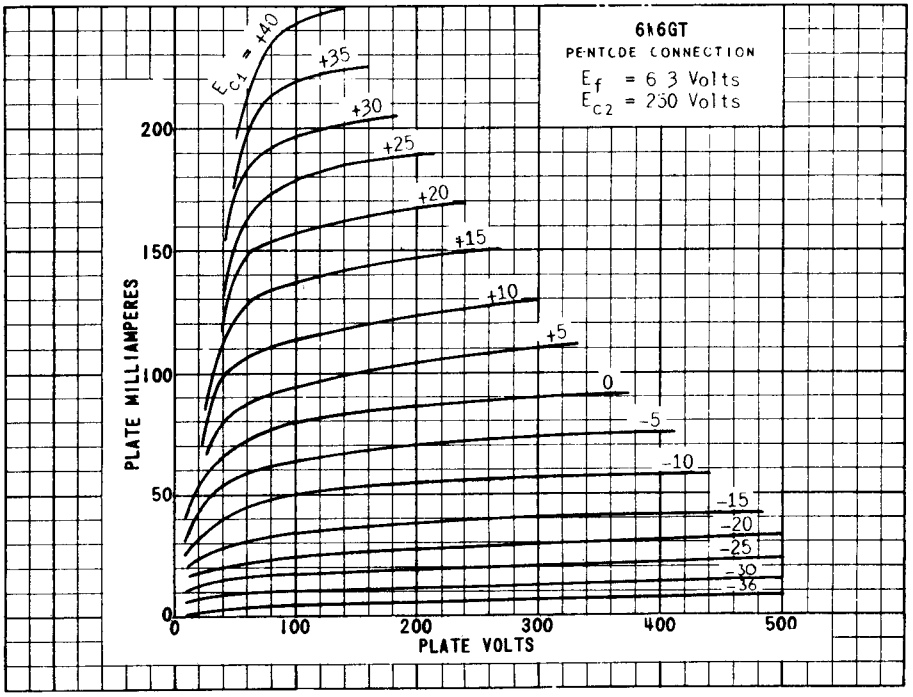
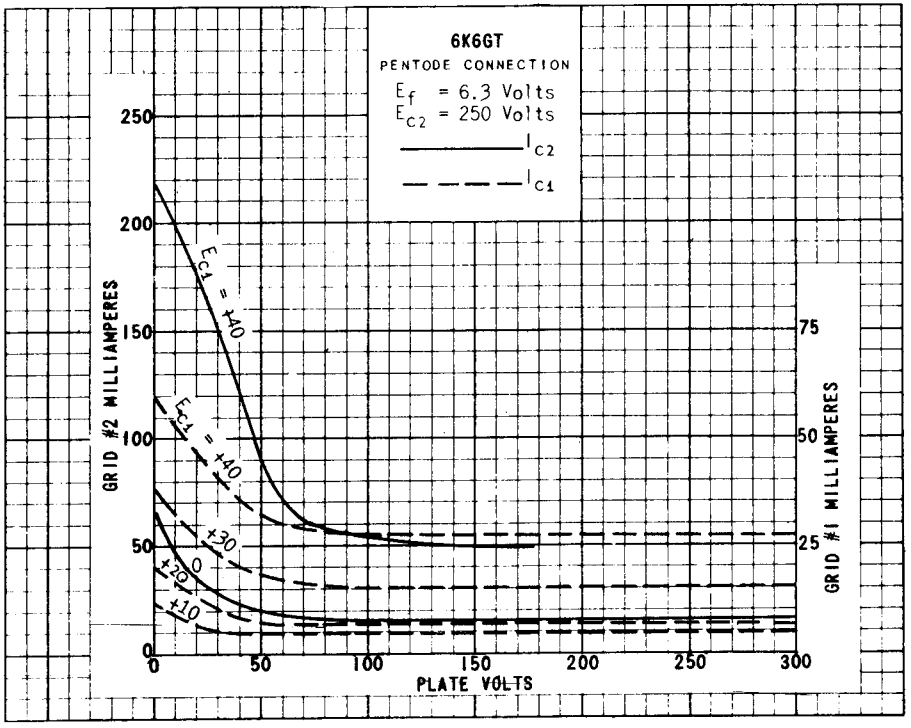
→ INDICATES A CHANGE OR ADDITION.


6K6GT
PENTODE CONNECTION
E_f = 6.3 Volts
E_{c2} = 250 Volts
E_{c1} = 0
-5
-10
-15
-20
-25
-30
-36
PLATE MILLIAMPERES
PLATE VOLTS
0
25
50
75
100
0
100
200
300
400
500


6K6GT
PENTODE CONNECTION
E_f = 6.3 Volts
E_{c2} = 250 Volts
+40
E_{c1} = 0
GRID #2 MILLIAMPERES
PLATE VOLTS
0
25
50
75
100
0
50
100
150
200
250

6K6GT (7B5, 41)





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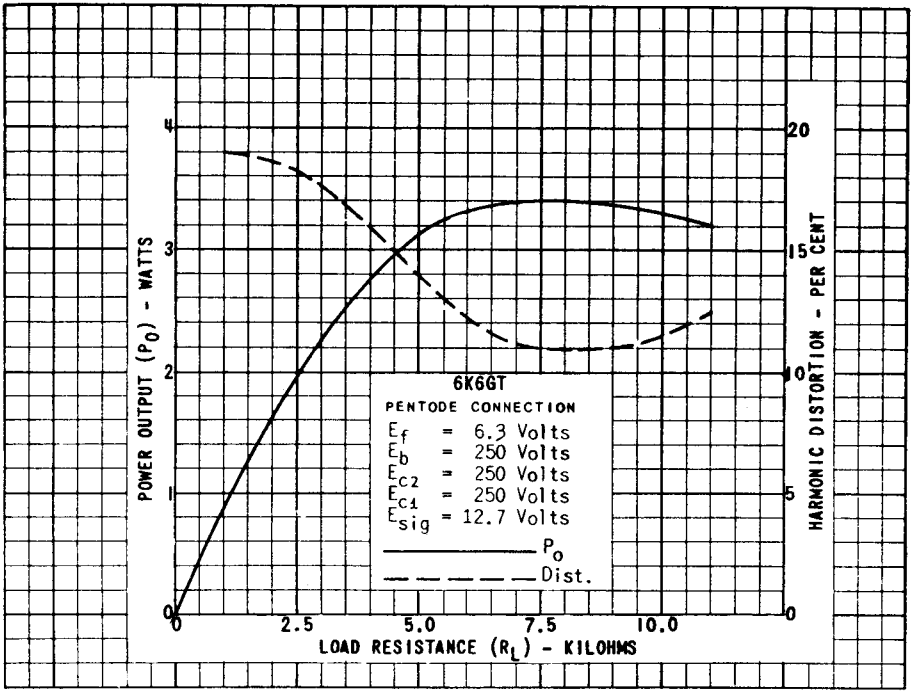

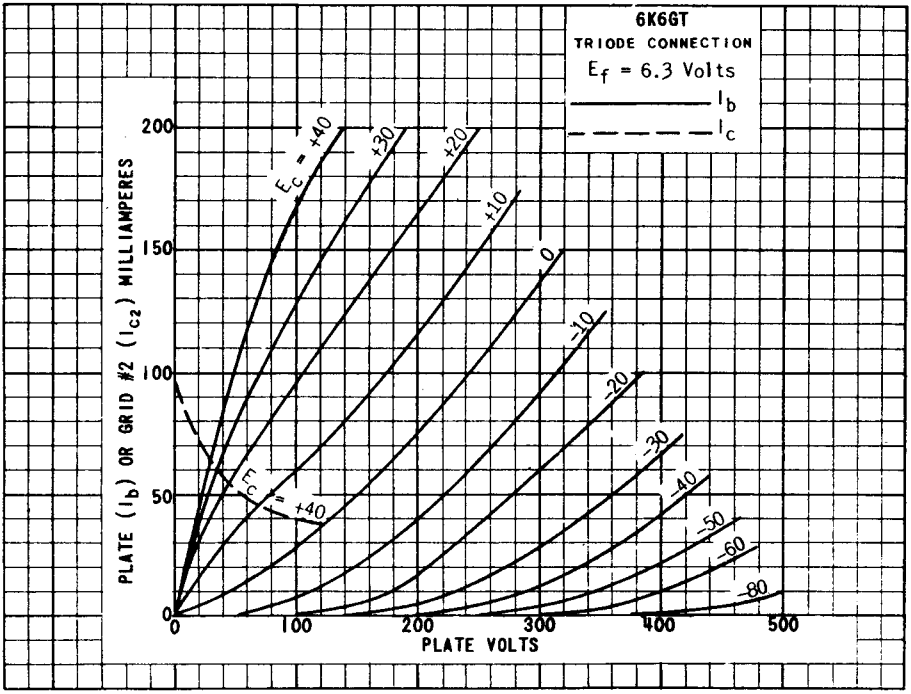

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