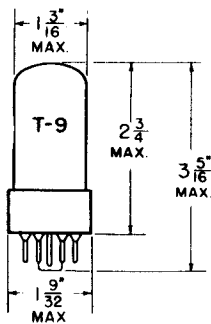


TUNG-SOL

BEAM PENTODE



GLASS BULB

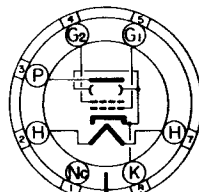
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 1.2 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

INTERMEDIATE SHELL
7 PIN OCTAL

7AC

THE 6W6GT IS A BEAM PENTODE POWER AMPLIFIER DESIGNED SPECIFICALLY FOR USE AS A VERTICAL SCANNING OUTPUT TUBE IN TELEVISION RECEIVERS. IT IS IDENTICAL IN CHARACTERISTICS AND DESIGN WITH THE 25L6GT.

DIRECT INTERELECTRODE CAPACITANCES

GRID TO PLATE: (G ₁ TO P) MAX.	0.5	μμf
INPUT: G ₁ TO (H+K+BP+G ₂)	15	μμf
OUTPUT: P TO (H+K+BP+G ₂)	9	μμf

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

VERTICAL DEFLECTION AMPLIFIER^A

FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM^A

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	200	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE ^B	1 000	VOLTS
MAXIMUM GRID #2 VOLTAGE ^C	150	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	300	VOLTS
MAXIMUM GRID #1 VOLTAGE	-50	VOLTS
MAXIMUM PEAK NEGATIVE PULSE GRID VOLTAGE ^B	-200	VOLTS
MAXIMUM PLATE DISSIPATION	10	WATTS
MAXIMUM GRID #2 DISSIPATION	1.25	WATTS

^A AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE CONCERNING TELEVISION BROADCAST STATIONS, FEDERAL COMMUNICATIONS COMMISSION.

^B THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE AND ITS DURATION MUST BE LIMITED TO 2.5 MILLISECONDS.

^C THE SCREEN VOLTAGE MAY EXCEED THIS VALUE PROVIDING THE SCREEN DISSIPATION IS KEPT WITHIN THE RATING SPECIFIED BY JETEC STANDARD J5-C4.

CONTINUED ON FOLLOWING PAGE

PRINTED IN U. S. A.

PLATE
2551
JAN. 1
1950

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

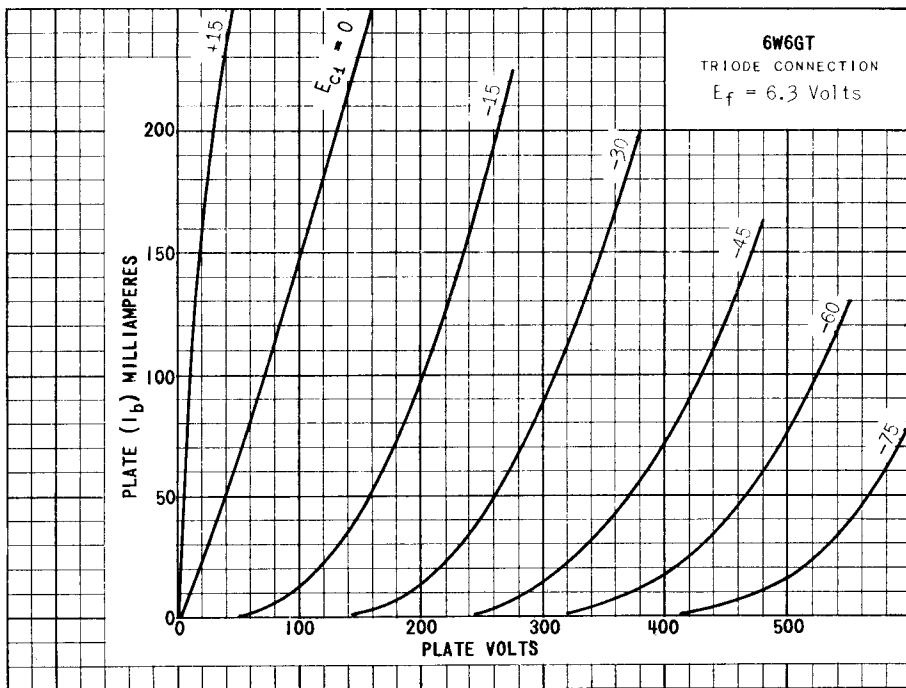
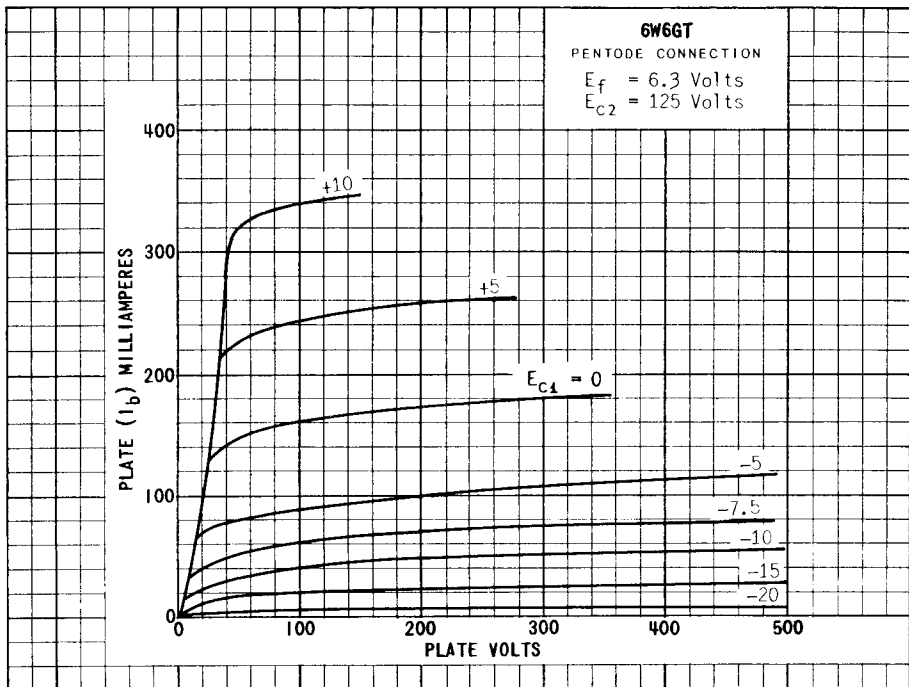
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	1.2	1.2	AMP.
PLATE VOLTAGE	110	200	VOLTS
GRID #2 VOLTAGE	110	125	VOLTS
GRID #1 VOLTAGE	-7.5	0	VOLTS
PEAK AF GRID #1 VOLTAGE	7.5	8.5	VOLTS
CATHODE BIAS RESISTOR	0	180	OHMS
PLATE RESISTANCE (APPROX.)	13 000	28 000	OHMS
TRANSCONDUCTANCE	8 000	8 000	μMHOS
ZERO SIGNAL PLATE CURRENT	49	46	MA.
ZERO SIGNAL GRID #2 CURRENT	4	2.2	MA.
MAXIMUM SIGNAL PLATE CURRENT	50	47	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	10	8.5	MA.
LOAD RESISTANCE	2 000	5 000	OHMS
TOTAL HARMONIC DISTORTION (APPROX.)	10	10	PERCENT
POWER OUTPUT	2.1	3.8	WATTS

VERTICAL DEFLECTION AMPLIFIER - TRIODE CONNECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	1.2	AMP.
DC PLATE VOLTAGE	225	VOLTS
TOTAL PEAK-TO-PEAK GRID INPUT VOLTAGE (APPROX.)	75	VOLTS
DC PLATE CURRENT (APPROX.)	10	MA.
TOTAL PEAK-TO-PEAK PLATE OUTPUT VOLTAGE (APPROX.)	800	VOLTS
GRID CIRCUIT RESISTANCE (MAX.)	3.3	MEGOHMS
CATHODE BIAS RESISTOR (MIN.)	470	OHMS



PRINTED IN U. S. A.

PLATE
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JAN. 1
1951

6W6GT

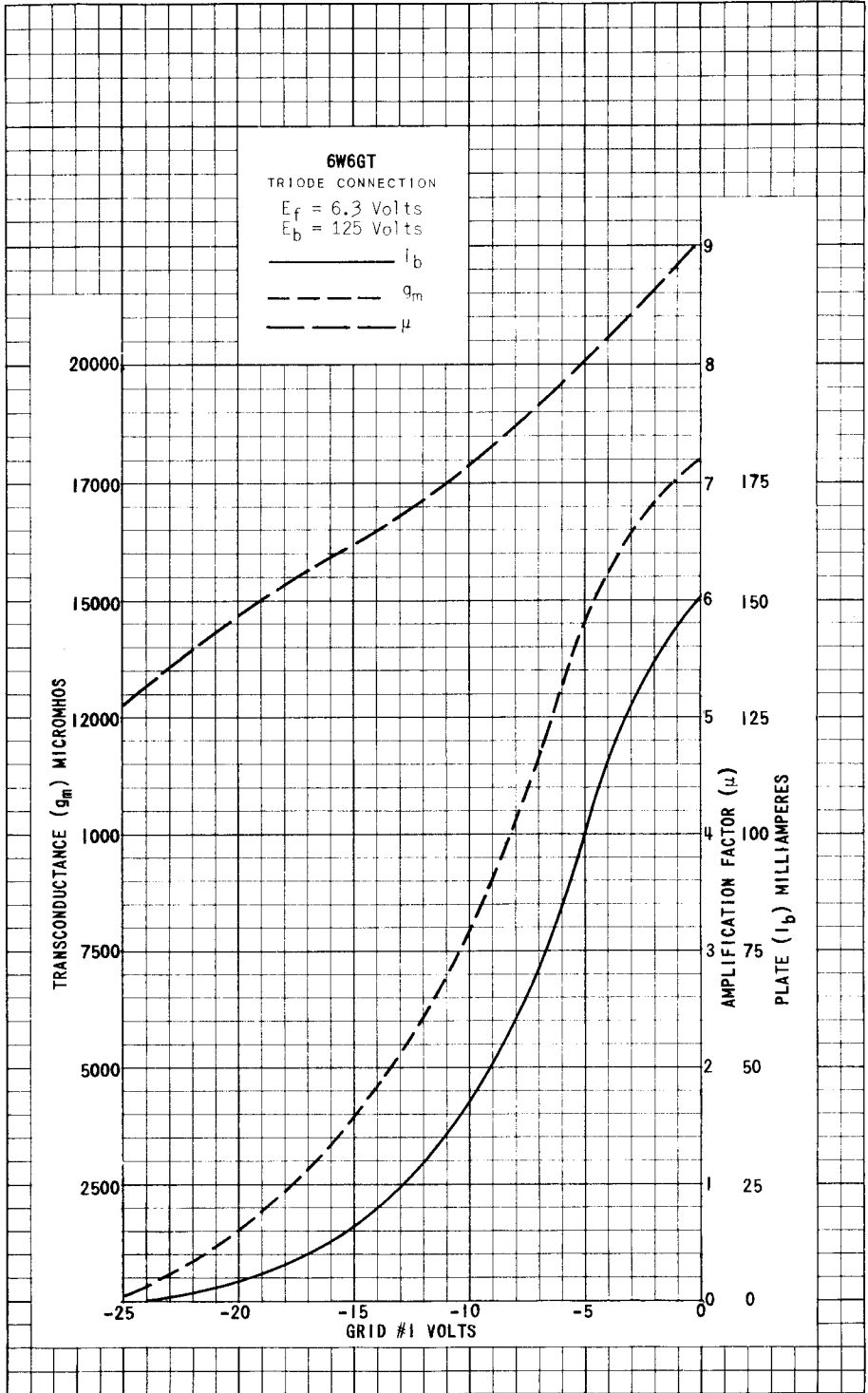
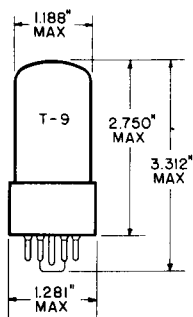


PLATE
2554
JAN. 1
1951

TUNG-SOL

BEAM PENTODE

COATED UNIOPTENTIAL CATHODE

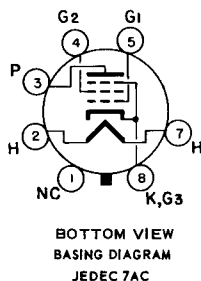


GLASS BULB
INTERMEDIATE SHELL OCTAL
B6-81 OR B7-7
OR
SHORT INTERMEDIATE
SHELL OCTAL
B6-84 OR B7-59
OUTLINE DRAWING
JEDEC 9-11 OR 9-41

FOR USE AS A VERTICAL
DEFLECTION AMPLIFIER
-IN TV RECEIVERS

AC OR DC

ANY MOUNTING POSITION



THE 6W6GT IS A BEAM PENTODE POWER AMPLIFIER DESIGNED SPECIFICALLY FOR USE AS A VERTICAL SCANNING OUTPUT TUBE IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID TO PLATE: (G1 TO P)	0.8	pf
INPUT: G1 TO (H+K+G2+G3)	15.0	pf
OUTPUT: P TO (H+K+G2+G3)	9.0	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	1200	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		6.3±0.6	VOLTS
CURRENT OPERATION		1200	MA.
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

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

→ MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

CLASS A1 AMPLIFIER

PLATE VOLTAGE	330	VOLTS
GRID 2 VOLTAGE	165	VOLTS
PLATE DISSIPATION	12	WATTS
GRID 2 DISSIPATION	1.35	WATTS
GRID 1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
CATHODE BIAS	0.5	MEGOHM

VERTICAL DEFLECTION AMPLIFIER^{A, B}

	TRIODE CONNECTED	PENTODE CONNECTED	
DC PLATE VOLTAGE	330	330	VOLTS
PEAK POSITIVE PULSE PLATE VOLTAGE	1200	1500	VOLTS
DC GRID 2 VOLTAGE		165	VOLTS
PLATE DISSIPATION	8.5	8	WATTS
GRID 2 DISSIPATION		1.2	WATT
PEAK NEGATIVE PULSE GRID 1 VOLTAGE	275	275	VOLTS
AVERAGE CATHODE CURRENT	65	65	MA.
PEAK CATHODE CURRENT	195	195	MA.
GRID 1 CIRCUIT RESISTANCE			
CATHODE BIAS	2.2	2.2	MEGOHMS

→ INDICATES A CHANGE.

TYPICAL OPERATING CHARACTERISTICS

CLASS A1 AMPLIFIER - SINGLE TUBE

PLATE VOLTAGE	110	200	VOLTS
GRID 2 VOLTAGE	110	125	VOLTS
GRID 1 VOLTAGE	-7.5	----	VOLTS
CATHODE BIAS RESISTOR	----	180	OHMS
PEAK AF GRID 1 VOLTAGE	7.5	8.5	VOLTS
PLATE RESISTOR (APPROX.)	13,000	28,000	OHMS
TRANSCONDUCTANCE	8,000	8,000	μMHOS
ZERO-SIGNAL PLATE CURRENT	49	46	MA.
MAXIMUM-SIGNAL PLATE CURRENT (APPROX.)	50	47	MA.
ZERO-SIGNAL GRID 2 CURRENT	4.0	2.2	MA.
MAXIMUM-SIGNAL GRID 2 CURRENT (APPROX.)	10	8.5	MA.
LOAD RESISTANCE	2,000	4,000	OHMS
TOTAL HARMONIC DISTORTION	10	10	PERCENT
POWER OUTPUT	2.1	3.8	WATTS

TRIODE CONNECTION

PLATE VOLTAGE	225	VOLTS
GRID VOLTAGE	-30	VOLTS
AMPLIFICATION FACTOR	6.2	
PLATE RESISTANCE (APPROX.)	1,600	OHMS
TRANSCONDUCTANCE	3,800	μMHOS
PLATE CURRENT	22	MA.
GRID VOLTAGE FOR $I_b=0.5$ MA. (APPROX.)	-42	VOLTS

^A TRIODE CONNECTION - GRID #2 TIED TO PLATE.^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.