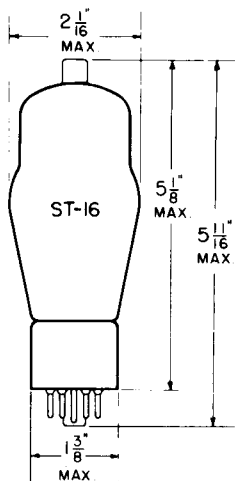


**TUNG-SOL**

**BEAM PENTODE**



**GLASS BULB**  
SMALL CAP

COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.9 AMP.

AC OR DC

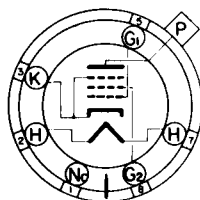
MOUNTING POSITION

VERTICAL - BASE UP OR

DOWN

HORIZONTAL - PLANE OF

PINS 2 & 7 VERTICAL



**BOTTOM VIEW**  
MEDIUM SHELL  
6 PIN OCTAL

58T

THE 6BG6G IS ESSENTIALLY A MECHANICAL REDESIGN OF TYPE 6L6G TO PERMIT OPERATION AS A HORIZONTAL DEFLECTION AMPLIFIER FOR TELEVISION SERVICE. IT USES A TOP CAP CONNECTION AND ADDITIONAL INSULATION FOR THE PLATE STRUCTURE TO WITHSTAND THE HIGH PEAK PLATE VOLTAGE ENCOUNTERED IN SUCH CIRCUITS.

**DIRECT INTERELECTRODE CAPACITANCES**

WITH NO EXTERNAL SHIELD

GRID #1 TO PLATE: (G <sub>1</sub> TO P) MAX.	0.34 ←	μf
INPUT: G <sub>1</sub> TO (H+K+G <sub>2</sub> +IS)	12 ←	μf
OUTPUT: P TO (H+K+G <sub>2</sub> +IS)	6.5	μf

**RATINGS ←**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

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 +DC POWER SUPPLY)	700	VOLTS
MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABS. MAX.)	6600	VOLTS
MAXIMUM PEAK NEGATIVE PLATE VOLTAGE	1500	VOLTS
MAXIMUM PLATE DISSIPATION <sup>B</sup>	20	WATTS
MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE	300	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	350	VOLTS
MAXIMUM GRID #2 DISSIPATION	3.2	WATTS
MAXIMUM AVERAGE CATHODE CURRENT	110	MA.
MAXIMUM PEAK CATHODE CURRENT	400	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	0.47	MEG OHM
MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)	210	°C

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS ←

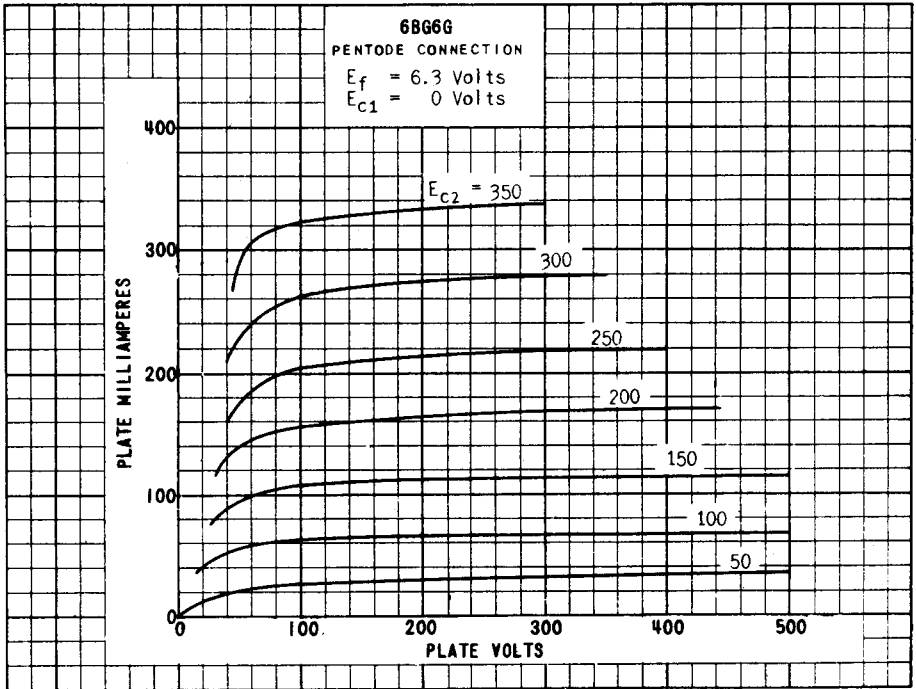
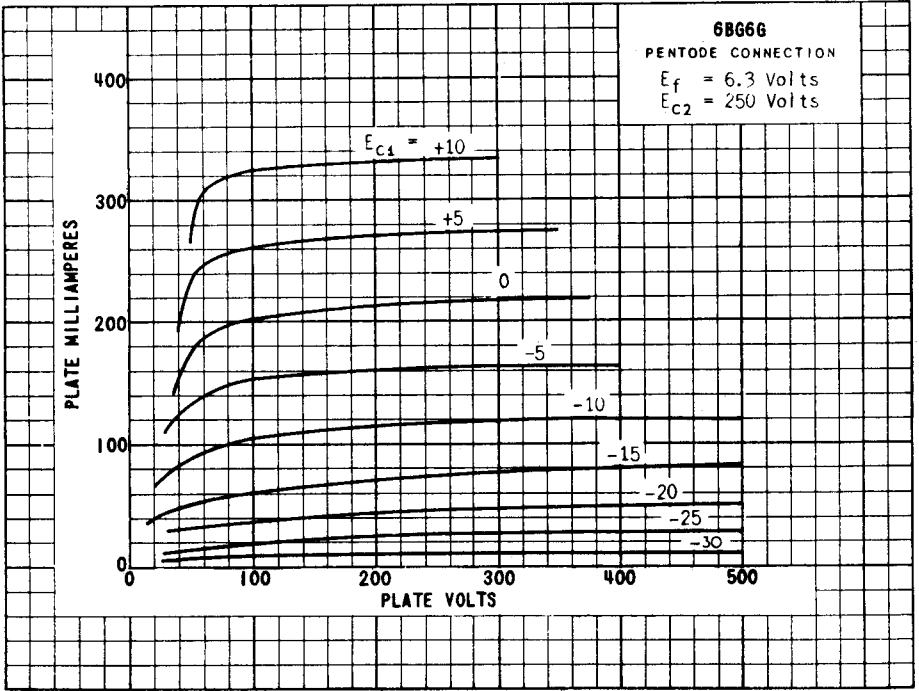
HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.9	AMP.
PENTODE OPERATION: WITH $E_b=250$ V., $E_{c2}=250$ V., & $E_{c1}=-15$ V.		
PLATE CURRENT	75	MA.
GRID #2 CURRENT	4	MA.
TRANSCONDUCTANCE	6 000	μMHOS
PLATE RESISTANCE	25 000	OHMS
ZERO BIAS: WITH $E_b=60$ V. & $E_{c2}=250$ V. (INSTANTANEOUS VALUES)		
PLATE CURRENT	180	MA.
GRID #2 CURRENT	18	MA.
CUTOFF: FOR $I_b=1$ MA. WITH $E_b=250$ V. & $E_{c2}=250$ V.		
GRID #1 VOLTAGE (APPROX.)	-45	VOLTS
TRIODE μ: WITH $E_b = E_{c2}=250$ V. & $E_{c1} = -15$ V.	8.0	

<sup>A</sup> FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION", THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

<sup>F</sup> 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.

*SIMILAR TYPE REFERENCE: Except for heater ratings the 6BG6G is identical to the 19BG6G.*

→ INDICATES A CHANGE.



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# 6BG6G

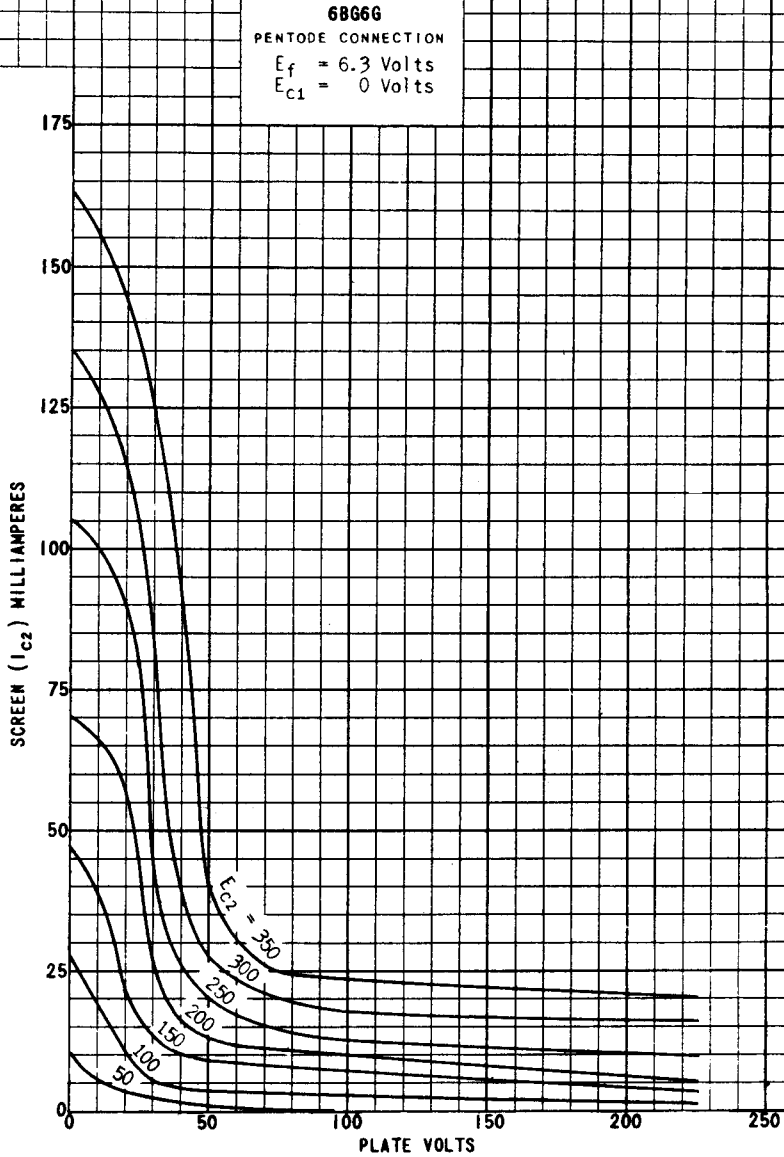


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