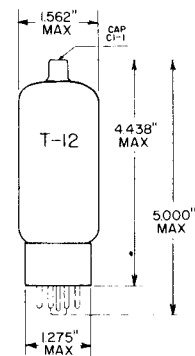


## TUNG-SOL

## BEAM POWER PENTODE



GLASS BULB  
 B6-110 OR B6-120 OR B5-123 ←  
 SHORT MEDIUM SHELL  
 5 PIN OCTAL WITH  
 EXTERNAL BARRIERS

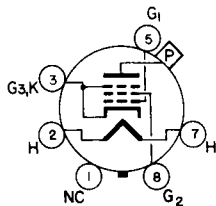
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.9 AMP.  
 AC OR DC

VERTICAL MOUNTING POSITION

HORIZONTAL OPERATION PERMITTED IF PINS  
 #2 AND #7 ARE IN A VERTICAL PLANE.



BOTTOM VIEW  
 BASING DIAGRAM  
 JEDEC 5BT

THE 6BG6GA IS A BEAM-POWER PENTODE DESIGNED PRIMARILY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS. ELECTRICALLY AND PHYSICALLY, THE 6BG6GA IS A REPLACEMENT FOR THE 6BG6G; IT DIFFERS PRIMARILY FROM THE 6BG6G BY EMPLOYING A STRAIGHT-SIDED T-12 ENVELOPE.

**DIRECT INTERELECTRODE CAPACITANCES — APPROX.**  
 WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.8	pf
INPUT	11.0	pf
OUTPUT	6.0	pf

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM  
 HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

MAXIMUM DC PLATE SUPPLY VOLTAGE	700	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE (ABS. MAX.)	6600	VOLTS
MAXIMUM PEAK NEGATIVE PULSE PLATE VOLTAGE	1500	VOLTS
MAXIMUM PLATE DISSIPATION <sup>B</sup>	20	WATTS
MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE	300	VOLTS
MAXIMUM GRID #2 VOLTAGE	350	VOLTS
MAXIMUM GRID #2 DISSIPATION	3.2	WATTS
MAXIMUM DC 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	°C

<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>B</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.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

**RATINGS — CONT'D**  
 INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM  
 HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

## 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

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PLATE VOLTAGE	60	250	VOLTS
GRID #2 VOLTAGE	250	250	VOLTS
PLATE CURRENT	180	75	MA.
GRID #2 CURRENT	18	4.0	MA.
GRID #1 VOLTAGE	0	-15	VOLTS
PLATE RESISTANCE (APPROX.)		25 000	OHMS
TRANSCONDUCTANCE		6 000	$\mu$ MHOS
GRID #1 VOLTAGE (APPROX.) FOR $I_b=1.0$ MA.		-45	VOLTS
TRIODE AMPLIFICATION FACTOR <sup>C</sup>		8.0	

<sup>C</sup> TRIODE CONNECTED (GRID #2 TIED TO PLATE):  $E_b = E_{c2} = 250$  VOLTS AND  $E_{c1} = -15$  VOLTS.