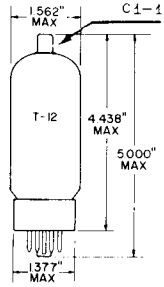
TUNG-SOL

BEAM PENTODE

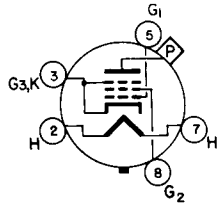


GLASS BULB
B8-110 OR B5-123
SHORT MEDIUM SHELL
5-PIN WITH
EXTERNAL BARRIERS

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 2.5 AMP.
AC OR DC

VERTICAL MOUNTING POSITION
HORIZONTAL OPERATION IS PERMITTED IF PINS 2 AND 7 ARE IN A VERTICAL PLANE.



BOTTOM VIEW
BASING DIAGRAM
JEDEC 5BT

THE 6CD6GA IS A BEAM PENTODE DESIGNED FOR USE AS A HORIZONTAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS. FEATURES OF THIS TUBE ARE AN EXTREMELY HIGH PERVEANCE, HIGH PLATE CURRENT AT LOW PLATE AND SCREEN VOLTAGES AND A HIGH RATIO OF PLATE TO SCREEN CURRENT.

DIRECT INTERELECTRODE CAPACITANCES — APPROX.
WITH NO EXTERNAL SHIELD

GRID #1 TO PLATE	1.1	pf
INPUT	22	pf
OUTPUT	8.5	pf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM[A]

HORIZONTAL-DEFLECTION AMPLIFIER SERVICE[B]

MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM DC PLATE-SUPPLY VOLTAGE (BOOST + DC POWER SUPPLY)	700	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE	7 000	VOLTS
MAXIMUM NEGATIVE PULSE PLATE VOLTAGE	1 500	VOLTS
MAXIMUM GRID #2 VOLTAGE	175	VOLTS
MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE	200	VOLTS
MAXIMUM PLATE DISSIPATION[C]	20	WATTS
MAXIMUM GRID #2 DISSIPATION	3.0	WATTS
MAXIMUM DC CATHODE CURRENT	200	MA.
MAXIMUM PEAK CATHODE CURRENT	700	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	0.47	MEGOHM
MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)	225	°C

[A] UNLESS OTHERWISE SPECIFIED.

[B] FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERALL 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.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PLATE VOLTAGE	60	175	VOLTS
GRID #2 VOLTAGE	100	175	VOLTS
GRID #1 VOLTAGE	0[D]	−30	VOLTS
PLATE RESISTANCE (APPROX.)	---	7 200	OHMS
TRANSCONDUCTANCE	---	7 700	μMHOS
PLATE CURRENT	230	75	MA.
GRID #2 CURRENT	21	5.5	MA.
GRID #1 VOLTAGE (APPROX.) FOR I_b = 1.0 MA.	---	−55	VOLTS
TRIODE AMPLIFICATION FACTOR[E]	---	3.9	

[D] APPLIED FOR VERY SHORT INTERVAL SO AS NOT TO DAMAGE TUBE.

[E] TRIODE CONNECTION (SCREEN TIED TO PLATE) WITH E_b = E_{c2} = 175 VOLTS AND E_{c1} = −30 VOLTS.

SIMILAR TYPE REFERENCE: *The 6CD6GA may be used as a replacement for the 6CD6G; it differs from the 6CD6G by employing a straight-sided T-12 envelope and incorporating increased maximum ratings for plate dissipation, pulse plate voltage, and bulb temperature.*