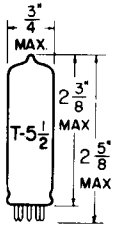
TUNG-SOL

PENTODE

MINIATURE TYPE

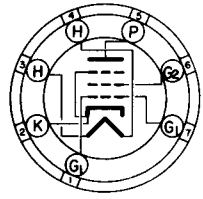


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 1.2 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
7B2

THE 6BF5 IS A BEAM PENTODE POWER AMPLIFIER USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR USE AS A VERTICAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

GRID #1 TO PLATE: (G_1 TO P)	0.65	μμf
INPUT: G_1 TO (H+K+G_2)	14	μμf
OUTPUT: P TO (H+K+G_2)	6	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

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 PLATE VOLTAGE	250	VOLTS
MAXIMUM GRID #2 VOLTAGE	117	VOLTS
MAXIMUM PLATE DISSIPATION	5.5	WATTS
MAXIMUM GRID #2 DISSIPATION	1.25	WATTS

VERTICAL DEFLECTION AMPLIFIER[A]

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM DC PLATE VOLTAGE	250	VOLTS
MAXIMUM PEAK POSITIVE VOLTAGE (ABSOLUTE MAXIMUM)	900	VOLTS
MAXIMUM PLATE DISSIPATION[B]	5.0	WATTS
MAXIMUM PEAK NEGATIVE GRID VOLTAGE	250	VOLTS
MAXIMUM CATHODE CURRENT (AVERAGE)	40	MA.
MAXIMUM PEAK CATHODE CURRENT	120	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	2.2	MEGOHMS

[A] 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% OF A SCANNING CYCLE.

[B] 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

CLASS A_1 AMPLIFIER – SINGLE TUBE

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	1.2	AMP.
PLATE VOLTAGE	110	VOLTS
GRID #2 VOLTAGE	110	VOLTS
GRID #1 VOLTAGE	-7.5	VOLTS
PEAK AF GRID #1 VOLTAGE	7.5	VOLTS
ZERO-SIGNAL PLATE CURRENT	36	MA.
MAXIMUM SIGNAL PLATE CURRENT	39	MA.
ZERO-SIGNAL GRID #2 CURRENT	4	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	10.5	MA.
PLATE RESISTANCE (APPROX.)	12 000	OHMS
TRANSCONDUCTANCE	7 500	µMHOS
LOAD RESISTANCE	2 500	OHMS
MAXIMUM SIGNAL POWER OUTPUT	1.9	WATTS
TOTAL HARMONIC DISTORTION (APPROX.)	10	PERCENT

TRIODE CONNECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	1.2	AMP.
PLATE VOLTAGE	225	VOLTS
GRID VOLTAGE	-30	VOLTS
PLATE CURRENT	10	MA.
TRANSCONDUCTANCE	2 700	µMHOS
AMPLIFICATION FACTOR	6.7	
PLATE RESISTANCE	2 500	OHMS
GRID VOLTAGE FOR I_b = 0.5 MA. (APPROX.)	-40	VOLTS