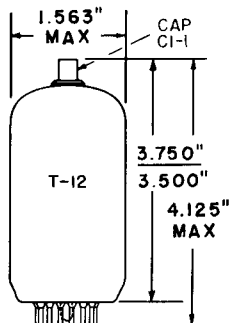
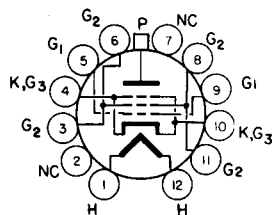


## TUNG-SOL

PENTODE  
COMPACTRON

GLASS BULB  
BUTTON 12 PIN BASE E 12-74  
OUTLINE DRAWING  
JEDEC 12-89

BEAM PENTODE  
FOR  
HORIZONTAL-DEFLECTION  
AMPLIFIER APPLICATIONS  
IN TELEVISION RECEIVERS  
COATED UNIPOTENTIAL CATHODE  
ANY MOUNTING POSITION



BOTTOM VIEW  
BASING DIAGRAM  
JEDEC 12 FB

THE 6HF5 IS A BEAM-POWER PENTODE IN THE 12 PIN COMPACTRON CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN COLOR TELEVISION RECEIVERS.

### DIRECT INTERELECTRODE CAPACITANCES WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE ( G1 TO P )	0.56	pf
INPUT: G1 TO ( H + K + G2 + G3 )	24	pf
OUTPUT: P TO ( H + K + G2 + G3 )	10	pf

### HEATER CHARACTERISTICS AND RATINGS

AVERAGE CHARACTERISTICS	6.3 VOLTS	2.25	AMPS.
LIMITS OF APPLIED VOLTAGE-AC OR DC		6.3 ± 0.6	VOLTS
HEATER-CATHODE VOLTAGE:			
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

DC PLATE-SUPPLY VOLTAGE - BOOST + DC POWER SUPPLY	990	VOLTS
PEAK POSITIVE PULSE PLATE VOLTAGE - ABSOLUTE MAX. VALUE	7,500	VOLTS
PEAK NEGATIVE PULSE PLATE VOLTAGE	1,100	VOLTS
GRID 2 VOLTAGE	190	VOLTS
PEAK NEGATIVE GRID 1 VOLTAGE	250	VOLTS
PLATE DISSIPATION <sup>A</sup>	28	WATTS
GRID 2 DISSIPATION	5.5	WATTS
DC CATHODE CURRENT	315	MA
PEAK CATHODE CURRENT	1,100	MA
GRID 1 CIRCUIT RESISTANCE	1.0	MEG OHM
BULB TEMPERATURE AT HOTTEST POINT	225	° C

A - 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.

## CHARACTERISTICS AT TYPICAL OPERATION

PLATE VOLTAGE	5,000	70	175	VOLTS
GRID 2 VOLTAGE	125	125	125	VOLTS
GRID 1 VOLTAGE	-	0	-25	VOLTS
PLATE CURRENT	-	570 <sup>B</sup>	125	MA
GRID 2 CURRENT	-	34 <sup>B</sup>	4.5	MA
TRANSCONDUCTANCE	-	-	11,300	μMHOS
PLATE RESISTANCE - APPROX.	-	-	5,600	OHMS
GRID 1 VOLTAGE FOR $I_b = 1.0$ MA-APPROX.	-140	-	-54	VOLTS
TRIODE AMPLIFICATION FACTOR <sup>C</sup>	-	-	3	

B - VALUES MEASURED BY A METHOD INVOLVING A RECURRENT WAVE FORM SUCH THAT THE PLATE AND GRID 2 DISSIPATIONS WILL BE KEPT WITHIN RATINGS IN ORDER TO PREVENT DAMAGE TO THE TUBE.

C - GRID 2 TIED TO PLATE -  $E_b = E_{c2} = 125$  VOLTS,  $E_{c1} = -25$  VOLTS