TUNG-SOL

BEAM PENTODE

MINIATURE TYPE

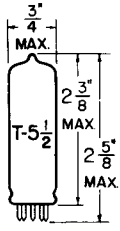
COATED UNIPOTENTIAL CATHODE

HEATER

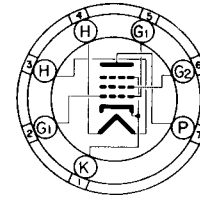
16.8 VOLTS 0.45 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

MINIATURE BUTTON
7 PIN BASE

7CV

THE 17C5 IS A BEAM POWER AMPLIFIER USING THE 7 PIN MINIATURE CONSTRUCTION. BECAUSE OF ITS HIGH POWER SENSITIVITY AT LOW PLATE-SCREEN VOLTAGE, IT IS PARTICULARLY ADAPTABLE TO AC/DC RECEIVER APPLICATIONS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME THE 17C5 IS IDENTICAL TO THE 50C5.

DIRECT INTERELECTRODE CAPACITANCES – APPROX.

WITH NO EXTERNAL SHIELD

GRID TO PLATE: G_1 TO P	0.6 ←	μμf
INPUT: G_1 TO (H+K&G_3+G_2)	13.0 ←	μμf
OUTPUT: P TO (H+K&G_3+G_2)	8.5 ←	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	16.8	VOLTS
MAXIMUM 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		
DC COMPONENT	200	VOLTS
TOTAL DC AND PEAK	300	VOLTS
MAXIMUM PLATE VOLTAGE	135	VOLTS
MAXIMUM GRID #2 VOLTAGE	117	VOLTS
MAXIMUM PLATE DISSIPATION	6.0 ←	WATTS
MAXIMUM GRID #2 DISSIPATION	1.25	WATTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0*	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
CATHODE BIAS	0.5	MEGOHM
MAXIMUM BULB TEMPERATURE		
(AT HOTTEST POINT ON BULB SURFACE)	220 ←	°C
HEATER WARM-UP TIME*	11.0	SECONDS

ALL ELECTRICAL DATA EXCEPT HEATER CHARACTERISTICS FOR TYPE 17C5 ARE IDENTICAL WITH THOSE OF TYPES 12C5, 12CU5, 50C5, 25C5, AND 50B5.

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

*INDICATES AN ADDITION.

→INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	16.8	VOLTS
HEATER CURRENT	0.45	AMP.
PLATE VOLTAGE	120 ←	VOLTS
GRID #2 VOLTAGE	110	VOLTS
GRID #1 VOLTAGE	-8 ←	VOLTS
PEAK AF GRID #1 VOLTAGE	8 ←	VOLTS
ZERO-SIGNAL PLATE CURRENT	49	MA.
ZERO-SIGNAL GRID #2 CURRENT	4	MA.
MAXIMUM SIGNAL PLATE CURRENT	50	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	8.5	MA.
PLATE RESISTANCE (APPROX.)	10 000	OHMS
TRANSCONDUCTANCE	7 500	μMHOS
LOAD RESISTANCE	2 500	OHMS
TOTAL HARMONIC DISTORTION	10 ←	PERCENT
MAXIMUM SIGNAL POWER OUTPUT	2.3 ←	WATTS