TUNG-SOL

BEAM PENTODE

MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

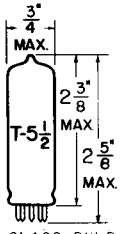
HEATER

50±10% VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION

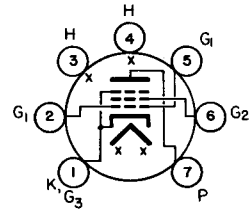
FOR SERIES STRING



GLASS BULB

MINIATURE BUTTON 7 PIN BASE E7-1 OUTLINE DRAWING

JEDEC 5-3



BOTTOM VIEW

BASING DIAGRAM

JEDEC 7CV

THE 50C5 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.

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	50±10%	VOLTS
MAXIMUM HEATER–CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DC AND PEAK	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	150	VOLTS
MAXIMUM GRID #2 VOLTAGE	130	VOLTS
MAXIMUM PLATE DISSIPATION	7	WATTS
MAXIMUM GRID #2 DISSIPATION	1.4	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

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

→INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

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