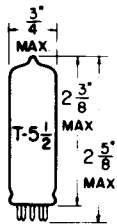


**TUNG-SOL**

**PENTODE**  
MINIATURE TYPE



**GLASS BULB**

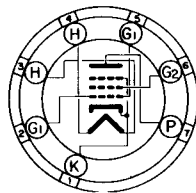
COATED UNIPOTENTIAL CATHODE

HEATER

50 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



**BOTTOM VIEW**  
MINIATURE BUTTON  
7 PIN BASE  
TCV

THE 50CA5 IS A BEAM PENTODE USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE IN THE AUDIO FREQUENCY POWER OUTPUT STAGE OF TELEVISION AND RADIO RECEIVERS. IT FEATURES HIGH POWER SENSITIVITY AT RELATIVELY LOW PLATE AND SCREEN VOLTAGES. EXCEPT FOR HEATER RATINGS, IT IS IDENTICAL TO THE 6AC5.

**DIRECT INTERELECTRODE CAPACITANCES**  
WITH NO EXTERNAL SHIELD

GRID #1 TO PLATE	0.5	μf
INPUT	15	μf
OUTPUT	9	μf

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	50	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER POSITIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
DC	100	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	130	VOLTS
MAXIMUM GRID #2 VOLTAGE	130	VOLTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM PLATE DISSIPATION	5.0	WATTS
MAXIMUM GRID #2 DISSIPATION	1.4	WATTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
CATHODE BIAS	0.5	MEGOHM
BULB TEMPERATURE AT HOTTEST POINT	180	°C

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

HEATER VOLTAGE	50	VOLTS	
HEATER CURRENT	0.15	AMP.	
PLATE VOLTAGE	110	125	VOLTS
GRID #2 VOLTAGE	110	125	VOLTS
GRID #1 VOLTAGE	-4.0	-4.5	VOLTS
PEAK AF GRID #1 VOLTAGE	4.0	4.5	VOLTS
PLATE RESISTANCE (APPROX.)	16 000	15 000	OHMS
TRANSCONDUCTANCE	8 100	9 200	μMHOS
ZERO-SIGNAL PLATE CURRENT	32	37	MA.
MAXIMUM SIGNAL PLATE CURRENT (APPROX.)	31	36	MA.
ZERO-SIGNAL GRID #2 CURRENT	3.5	4.0	MA.
MAXIMUM SIGNAL GRID #2 CURRENT (APPROX.)	7.5	11	MA.
LOAD RESISTANCE	3 500	4 500	OHMS
TOTAL HARMONIC DISTORTION (APPROX.)	5	6	PERCENT
MAXIMUM SIGNAL POWER OUTPUT	1.1	1.5	WATTS

