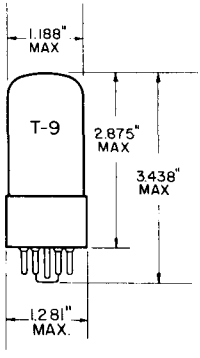
TUNG-SOL

BEAM-POWER PENTODE



GLASS BULB
INTERMEDIATE - SHELL
6 PIN OCTAL B6-81
OUTLINE DRAWING
JEDEC 9-15

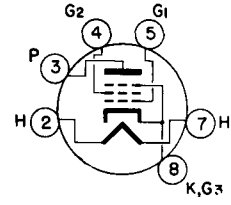
COATED UNIPOTENTIAL CATHODE

HEATER

6.3±10% VOLTS 0.8 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 7AC

THE 6EZ5 IS A BEAM-POWER PENTODE DESIGNED FOR USE AS THE VERTICAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS THAT EMPLOY 110-DEGREE DEFLECTION PICTURE TUBES. FEATURES OF THE TUBE INCLUDE HIGH PERVEANCE AND HIGH PLATE DISSIPATION.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.6	μμf
INPUT	9.0	μμf
OUTPUT	7.0	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

VERTICAL-DEFLECTION-AMPLIFIER SERVICE[A]

MAXIMUM DC PLATE VOLTAGE	350	VOLTS
MAXIMUM PEAK PULSE PLATE VOLTAGE	2500	VOLTS
MAXIMUM PEAK NEGATIVE-PULSE GRID #1 VOLTAGE*	250	VOLTS
MAXIMUM SCREEN VOLTAGE	300	VOLTS
MAXIMUM PLATE DISSIPATION[B]	12	WATTS
MAXIMUM SCREEN DISSIPATION[B]	2.75	WATTS
MAXIMUM DC CATHODE CURRENT	75	MA.
MAXIMUM PEAK CATHODE CURRENT	260	MA.
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		
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
WITH CATHODE BIAS	2.2	MEGOHMS
WITH FIXED BIAS	1.0	MEGOHMS
BULB TEMPERATURE AT HOTTEST POINT	200	C

*INDICATES AN ADDITION.

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

AVERAGE CHARACTERISTICS

HEATER VOLTAGE	6.3±10%	6.3±10%	VOLTS
HEATER CURRENT	0.8	0.8	AMP.
PLATE VOLTAGE	60	250	VOLTS
SCREEN VOLTAGE	250	250	VOLTS
GRID #1 VOLTAGE	0[C]	-20	VOLTS
PLATE RESISTANCE (APPROX.)	---	50 000	OHMS
TRANSCONDUCTANCE	---	4 100	μMHOS
PLATE CURRENT	180	43	MA.
SCREEN CURRENT	26	3.5	MA.
GRID #1 VOLTAGE (APPROX.) FOR I_b = 100 μAMPS.	---	-50	VOLTS

[A]FOR OPERATION IN A 525 LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION", THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE 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.

[C]APPLIED FOR SHORT INTERVAL (TWO SECONDS MAXIMUM) SO AS NOT TO DAMAGE TUBE.

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.