

TUNG-SOL

DIODE PENTODE

MINIATURE TYPE

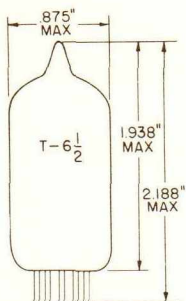
COATED UNIPOTENTIAL CATHODE

HEATER

 $6.3 \pm 10\%$ VOLTS 450 MA.

AC OR DC

ANY MOUNTING POSITION



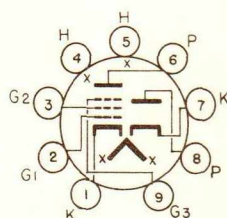
GLASS BULB

MINIATURE BUTTON

9 PIN BASE E9-1

OUTLINE DRAWING

JEDEC 6-2



BOTTOM VIEW
PINNING DIAGRAM
JEDEC 9CY

THE 6AM8A IS A DIODE PENTODE ESPECIALLY DESIGNED FOR USE AS A VIDEO DETECTOR AND IF AMPLIFIER IN TELEVISION RECEIVERS. IN ADDITION, 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.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD ^A	WITHOUT SHIELD	
PENTODE			
GRID #1 TO PLATE (MAX.)	0.015	0.015	pf
INPUT	6.0	6.5	pf
OUTPUT	3.4	2.6	pf
DIODE			
INPUT: P TO (H+K)	2.3	1.8	pf
CATHODE TO (H+P)	3.0	3.0	pf
COUPLING (DIODE PLATE TO PENTODE PLATE)	0.035	0.10	pf
COUPLING (DIODE PLATE TO GRID #1)	0.005	0.006	pf
COUPLING (DIODE CATHODE TO PENTODE PLATE)	0.15	0.15	pf

^A SHIELD #315 CONNECTED TO GROUND.

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CONTINUED FROM PRECEDING PAGE

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	330	VOLTS
MAXIMUM PLATE DISSIPATION	3.2	WATTS
MAXIMUM GRID #2 VOLTAGE	SEE RATING CHART	
MAXIMUM GRID #2 SUPPLY VOLTAGE	330	VOLTS
MAXIMUM GRID #2 DISSIPATION	0.55	WATTS
MAXIMUM POSITIVE GRID #1 VOLTAGE	0	VOLTS
MAXIMUM GRID #3 VOLTAGE	0	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
CATHODE BIAS	1.0	MEGOHM
FIXED BIAS	0.25	MEGOHM
MAXIMUM DIODE CURRENT FOR CONTINUOUS OPERATION	5.0	MA.
HEATER WARM-UP TIME (APPROX.)*	11.0	SECONDS

* 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.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PLATE VOLTAGE	125	VOLTS
GRID #2 VOLTAGE	125	VOLTS
GRID #3 VOLTAGE	0	VOLTS
CATHODE RESISTOR	56	OHMS
PLATE CURRENT	12.5	MA.
GRID #2 CURRENT	3.2	MA.
TRANSCONDUCTANCE	7 800	μ MHOS
PLATE RESISTANCE (APPROX.)	0.3	MEGOHM
GRID #1 VOLTAGE FOR $I_b = 20 \mu A$. (APPROX.)	-6	VOLTS
PLATE CURRENT AT $E_{c1} = -3V \rightarrow R_k = 0$	2.0	MA.
DIODE PLATE VOLTAGE FOR		
DIODE CURRENT = 50 MA.	10	VOLTS

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.

