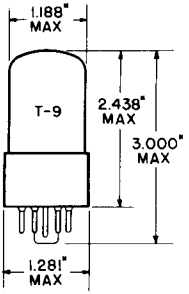
TUNG-SOL

→ DOUBLE TRIODE



GLASS BULB
INTERMEDIATE-SHELL
8 PIN OCTAL B8-142
OUTLINE DRAWING
JEDEC 9-5

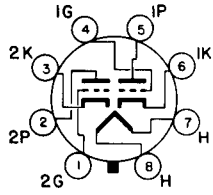
COATED UNIPOTENTIAL CATHODE

HEATER

6.3±10% VOLTS 0.9 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 8BD

THE 6DN7 IS A DOUBLE TRIODE WITH DISSIMILAR SECTIONS. SECTION #1 IS DESIGNED FOR USE AS A VERTICAL-DEFLECTION OSCILLATOR IN TELEVISION RECEIVERS AND SECTION #2 FOR USE AS A VERTICAL DEFLECTION AMPLIFIER.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

	SEC. #1	SEC. #2	
GRID TO PLATE	4.0	5.5	pf
INPUT	2.2	4.6	pf
OUTPUT	0.7	1.0	pf

RATINGS

INTERPRETED ACCORDING TO DESIGN-MAXIMUM SYSTEM

	VERT. OSC. SERV. (SEC.1)	VERT. DEFL. AMP. (SEC.2)	
MAXIMUM DC PLATE VOLTAGE	350	550	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE	---	2500	VOLTS
MAXIMUM PEAK NEGATIVE GRID VOLTAGE	400	250	VOLTS
MAXIMUM PLATE DISSIPATION	1.0	10^B	WATTS
MAXIMUM DC CATHODE CURRENT	---	50	MA.
MAXIMUM PEAK CATHODE CURRENT	---	150	MA.
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT	100	100	VOLTS
TOTAL DC AND PEAK	200	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200	200	VOLTS
MAXIMUM GRID-CIRCUIT RESISTANCE			
WITH FIXED BIAS	2.2	2.2	MEGOHMS
WITH CATHODE BIAS	2.2	---	MEGOHMS

→ INDICATES A CHANGE.

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

AVERAGE CHARACTERISTICS

	SECTION 1 (OSCILLATOR)	SECTION 2 (AMPLIFIER)		
PLATE VOLTAGE	250	150	250	VOLTS
GRID VOLTAGE	-8.0	0[C]	-9.5	VOLTS
AMPLIFICATION FACTOR	22.5	---	15.4	
PLATE RESISTANCE (APPROX.)	9000	---	2000	OHMS
TRANSCONDUCTANCE	2500	---	7700	μMHOS
PLATE CURRENT	8.0	68	41	MA.
GRID VOLTAGE (APPROX.) I_b = 10 μAMPS.	-18	---	---	VOLTS
GRID VOLTAGE (APPROX.) I_b = 50 μAMPS.	---	---	-23	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 CUTY 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.