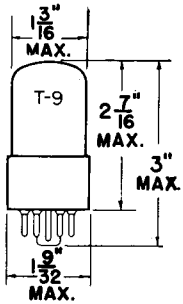
TUNG-SOL

DOUBLE-TRIODE

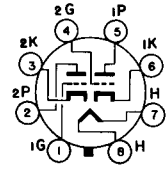


GLASS BULB
INTERMEDIATE SHELL
8 PIN OCTAL 88-6
OUTLINE DRAWING
JEDEC 9-5

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 1.05 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM
JEDEC 8BD

THE 6EA7 IS A DISSIMILAR DOUBLE-TRIODE DESIGNED FOR USE AS A COMBINED VERTICAL DEFLECTION OSCILLATOR AND AMPLIFIER IN TELEVISION RECEIVERS. SECTION ONE, A HIGH-MU TRIODE, IS INTENDED FOR SERVICE AS AN OSCILLATOR; SECTION TWO, A LOW-MU, HIGH PERVEANCE TRIODE, IS INTENDED FOR SERVICE AS AN AMPLIFIER.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

	SECTION 1	SECTION 2	
GRID TO PLATE	4.0	8.0	μμf
INPUT	2.2	6.0	μμf
OUTPUT	0.6	1.3	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

	VERTICAL OSCILLATOR SERVICE (SECTION 1)[A]	VERTICAL DEFLECTION AMPLIFIER (SECTION 2)[A]	
HEATER VOLTAGE	6.3	6.3	VOLTS
MAXIMUM ALLOWABLE HEATER VOLTAGE	5.7 to 6.9		VOLTS
MAXIMUM DC PLATE VOLTAGE	350	550	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE	---	1500	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	---	175	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	1.0	1.0	MEGOHMS
WITH CATHODE BIAS	2.2	2.2	MEGOHMS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

AVERAGE CHARACTERISTICS ←

	SECTION 1 (OSCILLATOR)	SECTION 2 (AMPLIFIER)		
PLATE VOLTAGE	250	60	175	VOLTS
GRID VOLTAGE	-3.0	0[C]	-25	VOLTS
AMPLIFICATION FACTOR	66	---	5.5	
PLATE RESISTANCE (APPROX.)	30 000	---	920	OHMS
TRANSCONDUCTANCE	2 200	---	6 000	μMHOS
PLATE CURRENT	2.0	100	40	MA.
GRID VOLTAGE (APPROX.)				
I_b = 20 μAMPS.	5.3	---	---	VOLTS
GRID VOLTAGE (APPROX.)				
I_b = 200 μAMPS.	---	---	-45	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.

[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.

→ INDICATES A CHANGE.