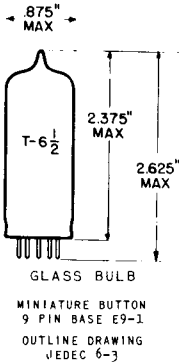


TUNG-SOL

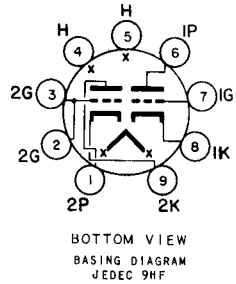
DOUBLE TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 500 MA.

AC OR DC

ANY MOUNTING POSITION



THE 6DR7 IS A DOUBLE TRIODE WITH DISSIMILAR SECTION IN THE 9-PIN MINIATURE CONSTRUCTION. SECTION #1 HAS A HIGH MU AND IS INTENDED FOR USE AS A VERTICAL DEFLECTION OSCILLATOR. SECTION #2 HAS A LOW MU AND IS DESIGNED FOR USE AS A VERTICAL DEFLECTION AMPLIFIER. SECTION #2 OF THE 6DR7 IS IDENTICAL TO SECTION #2 OF THE 6DE7.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

GRID TO PLATE: (G TO P)	4.5	8.5	pf
INPUT: G TO (H+K)	2.2	5.5	pf
OUTPUT: P TO (H+K)	0.34	1.0	pf

RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

VERTICAL DEFLECTION OSCILLATOR AND AMPLIFIER^A

	TRIODE #1 OSCILLATOR	TRIODE #2 AMPLIFIER	
MAXIMUM HEATER-CATHODE VOLTAGE ^B			
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 DC PLATE VOLTAGE	330	275	
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE (ABS. MAX.)	---	1500	VOLTS
MAXIMUM PEAK NEGATIVE PULSE GRID VOLTAGE	400	250	VOLTS
MAXIMUM PLATE DISSIPATION ^C	1.0	7.0	WATTS
MAXIMUM AVERAGE CATHODE CURRENT	20	50	MA.
MAXIMUM PEAK CATHODE CURRENT	70	175	MA.
MAXIMUM GRID CIRCUIT RESISTANCE SELF BIAS	2.2	2.2	MEGOHMS

CONTINUED ON FOLLOWING PAGE

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

	TRIODE #1	TRIODE #2	
PLATE VOLTAGE	250	150	VOLTS
GRID #1 VOLTAGE	-3	-17.5	VOLTS
PLATE CURRENT	1.4	35	MA.
TRANSCONDUCTANCE	1600	6500	μ MHOS
AMPLIFICATION FACTOR	64	6.0	
PLATE RESISTANCE (APPROX.)	40 000	925	
GRID VOLTAGE FOR $I_b = 10 \mu A$	5.5	---	VOLTS
GRID VOLTAGE FOR $I_b = 50 \mu A$	---	-44	VOLTS
PLATE CURRENT AT $E_c = -24$ Vdc	---	10	MA.
ZERO BIAS PLATE CURRENT			
$E_b = 60V$; $E_c = 0$ (INSTANTANEOUS VALUES)	---	80	MA.

→ INDICATES A CHANGE.

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 DESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOGIE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOGIE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.

C 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.

SIMILAR TYPE REFERENCE: The 6DR7 is identical to the 10DR7 except for heater ratings and heater warm-up time of the 10DR7.