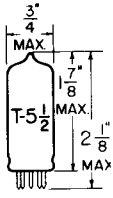
TUNG-SOL

DOUBLE TRIODE

MINIATURE TYPE

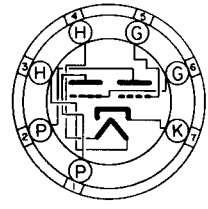


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
4.7 VOLTS 0.6 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
7BF

THE 5J6 IS A TWIN TRIODE HAVING TWO PLATES AND TWO GRIDS WITH A COMMON CATHODE USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE IN THE RF AMPLIFIER, OSCILLATOR AND MIXER STAGES OF 450 MA. SERIES HEATER OPERATED TV RECEIVERS. 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 HEATER TYPES WHICH ARE SIMILARLY CONTROLLED. WITH THE EXCEPTION OF HEATER RATINGS ITS CHARACTERISTICS ARE IDENTICAL TO THE 6J6.

DIRECT INTERELECTRODE CAPACITANCES

	WITHOUT SHIELD	WITH SHIELD[A]	
GRID TO PLATE (EACH SECTION)	1.6	1.5	μμf
INPUT (EACH SECTION)	2.2	2.6	μμf
OUTPUT (SECTION 1)	0.4	1.6	μμf
OUTPUT (SECTION 2)	0.4	1.0	μμf

[A] EXTERNAL SHIELD #316 CONNECTED TO PIN #7.

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

EACH SECTION

	AF AMPLIFIER	RF AMPLIFIER	
HEATER VOLTAGE	6.3		VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE ←	±100	±100	VOLTS
MAXIMUM PLATE VOLTAGE	300	300	VOLTS
MAXIMUM POSITIVE DC GRID VOLTAGE	0	0	VOLTS
MAXIMUM NEGATIVE DC GRID VOLTAGE	---	-40	VOLTS
MAXIMUM PLATE INPUT	---	4.5	WATTS
MAXIMUM PLATE DISSIPATION	1.5	1.5	WATTS
MAXIMUM PLATE CURRENT	---	15	MA.
MAXIMUM GRID CURRENT	---	8	MA.
MAXIMUM GRID CIRCUIT RESISTANCE (CATHODE BIAS)	0.5	---	MEGOHMS
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.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER – EACH SECTION

HEATER VOLTAGE	4.7	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE VOLTAGE	100	VOLTS
CATHODE BIAS RESISTOR (BOTH SECTIONS)[B]	50	OHMS
AMPLIFICATION FACTOR	38	
PLATE RESISTANCE	7 100	OHMS
TRANSCONDUCTANCE	5 300	μMHOS
PLATE CURRENT	8.5	MA.

[B] OPERATION WITH FIXED BIAS IS NOT RECOMMENDED.

CLASS C TELEGRAPHY – RF POWER AMPLIFIER AND OSCILLATOR

BOTH SECTIONS IN PUSH PULL

HEATER VOLTAGE	4.7	VOLTS
HEATER CURRENT	0.6	AMP.
DC PLATE VOLTAGE	150	VOLTS
DC GRID VOLTAGE[C]	−10	VOLTS
DC PLATE CURRENT	30	MA.
DC GRID CURRENT (APPROX.)	16	MA.
DRIVING POWER (APPROX.)	0.35	WATT
POWER OUTPUT (APPROX.)	3.5	WATTS

[C] OBTAINED BY A 525-OHMS GRID RESISTOR, A 220-OHMS CATHODE RESISTOR, OR A FIXED VOLTAGE SUPPLY.