

**TUNG-SOL**

**DOUBLE TRIODE**

**MINIATURE TYPE**

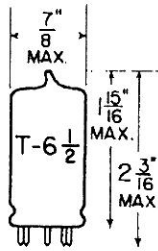
**UNIPOTENTIAL CATHODES**

**HEATER**

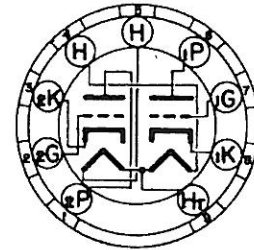
**SERIES**  
12.6 VOLTS  
150 MA.

**PARALLEL**  
6.3 VOLTS  
300 MA.

AC OR DC



GLASS BULB



**BOTTOM VIEW**  
SMALL BUTTON  
9 PIN BASE

FOR 12.6 VOLT OPERATION APPLY HEATER VOLTAGE BETWEEN PINS #4 AND #5. FOR 6.3 VOLT OPERATION APPLY HEATER VOLTAGE BETWEEN PIN #9 AND PINS #4 AND #5 CONNECTED TOGETHER.

ANY MOUNTING POSITION

THE 12AX7 COMBINES TWO COMPLETELY INDEPENDENT HIGH-MU TRIODES IN THE SMALL 9 PIN BUTTON CONSTRUCTION. IT IS ADAPTABLE TO APPLICATIONS WHERE HIGH VOLTAGE GAIN AND LOW HEATER POWER ARE THE IMPORTANT CONSIDERATION, SUCH AS VOLTAGE AMPLIFIERS, PHASE INVERTERS AND MULTIVIBRATORS. THE CENTER TAPPED HEATER CONNECTION PERMITS OPERATION FROM EITHER A 6.3 VOLT OR 12.6 VOLT SUPPLY AND IN 300 MA. OR 150 MA. SERIES HEATER SERVICE.

**DIRECT INTERELECTRODE CAPACITANCES**  
WITH NO EXTERNAL SHIELD

	TRIODE UNIT 1	TRIODE UNIT 2	
GRID TO PLATE: (G TO P)	1.7	1.7	μf
INPUT: G TO (H + K)	1.6	1.6	μf
OUTPUT: P TO (H + K)	0.46	0.34	μf

**RATINGS**

INTERPRETED ACCORDING TO RMA STANDARD MB-210

**EACH TRIODE UNIT**

	12.6	6.3	
HEATER VOLTAGE	12.6	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE		180	VOLTS
MAXIMUM PLATE VOLTAGE		300	VOLTS
MAXIMUM NEGATIVE DC GRID VOLTAGE		50	VOLTS
MAXIMUM POSITIVE DC GRID VOLTAGE		0	VOLTS
MAXIMUM PLATE DISSIPATION		1	WATT

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**

**CLASS A<sub>1</sub> AMPLIFIER - EACH TRIODE UNIT**

	12.6	6.3	12.6	6.3	
HEATER VOLTAGE	12.6	6.3	12.6	6.3	VOLTS
HEATER CURRENT	150	300	150	300	MA.
PLATE VOLTAGE		100		250	VOLTS
GRID VOLTAGE		-1		-2	VOLTS
PLATE CURRENT		0.5		1.2	MA.
PLATE RESISTANCE		80 000		62 500	OHMS
TRANSCONDUCTANCE		1 250		1 600	μMHOS
AMPLIFICATION FACTOR		100		100	