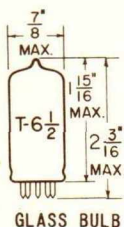


TUNG-SOL

DOUBLE TRIODE
MINIATURE TYPE

GLASS BULB

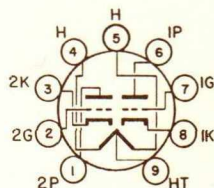
COATED UNIPOTENTIAL CATHODE

HEATER

SERIES	PARALLEL
12.6 VOLTS	6.3 VOLTS
0.15 AMPS.	0.3 AMPS.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
9 PIN BASE

9A

THE 12DT7 IS A HEATER-CATHODE TYPE HIGH-MU DOUBLE TRIODE IN THE 9 PIN MINIATURE CONSTRUCTION AND IS DESIGNED FOR USE AS A RESISTANCE-COUPLED VOLTAGE AMPLIFIER IN CRITICAL AUDIO DESIGNS WHERE LOW NOISE AND HUM ARE OF PRIMARY CONSIDERATION. IN OTHER RESPECTS IT IS SIMILAR TO TYPE 12AX7.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

	UNIT #1	UNIT #2	
GRID TO PLATE	1.7	1.7	$\mu\mu f$
INPUT	1.6	1.6	$\mu\mu f$
OUTPUT	0.46	0.34	$\mu\mu f$

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM
EACH UNIT

HEATER VOLTAGE	6.3/12.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	180	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	180	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM GRID VOLTAGE:		
NEGATIVE - BIAS VALUE	50	VOLTS
POSITIVE - BIAS VALUE	0	VOLTS
MAXIMUM PLATE DISSIPATION	1	WATT
MAXIMUM PEAK HEATER-CATHODE VOLTAGE	180	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**CLASS A₁ AMPLIFIER**

HEATER VOLTAGE		6.3/12.6	VOLTS
HEATER CURRENT		0.3/0.15	AMPS.
PLATE VOLTAGE	100	250	VOLTS
GRID VOLTAGE	-1	-2	VOLTS
AMPLIFICATION FACTOR	100	100	
PLATE RESISTANCE	80 000	62 500	OHMS
TRANSCONDUCTANCE	1 250	1 600	μMHOS
PLATE CURRENT	0.5	1.2	MA.

BALLISTIC NOISE LEVEL - EACH UNIT

AVERAGE VALUE	+5	DB
PLATE SUPPLY	250	VOLTS
PLATE LOAD RESISTOR	220	KILOHMS
CATHODE RESISTOR	3 000	OHMS
CATHODE BY-PASS CAPACITOR	100	μf
GRID RESISTOR	20	KILOHMS

AMPLIFIER COVERING FREQUENCY RANGE OF 30 TO 12,000 CPS. ±2db: FOR A SENSITIVITY OF 20mV IN, FOR 50mw OUT: EQUIVALENT TO 17 db: USING A HAND Mallet PER MIL-E-1C PAR. 4.10.3 AND PAR. 4.10.3.5.

EQUIVALENT NOISE AND HUM VOLTAGE
UNITS IN PARALLEL

AVERAGE VALUE	-46	DB
PLATE SUPPLY	100	VOLTS
PLATE LOAD RESISTOR	110	KILOHMS
CATHODE RESISTOR (UNBYPASSED)	2 400	OHMS
GRID RESISTOR	0	OHMS

AMPLIFIER FREQUENCY RESPONSE ± 0.5 db 20 TO 30,000 CPS @ 1 WATT OUT GAIN 110 db.

→ INDICATES A CHANGE