

ELECTRON TUBE, TRAVELING WAVE PULSED AMPLIFIER

HUGGINS LABORATORIES, INC.

TYPE 8258

DESCRIPTION: 2 WATT, BEAM PULSED, PERIODIC PERMANENT MAGNET FOCUSED, TRAVELING WAVE
(FORWARD WAVE), TUBE AMPLIFIER FOR OPERATING FROM 2320 TO 2680 MEGACYCLES.

ELEMENT OR TEST	LIMITS		UNITS
	MIN.	MAX.	
HEATER VOLTAGE	6.86	7.14	VRMS
HEATER CURRENT	--	1.2	AMPS
CATHODE CURRENT	--	40.0	MA DC
HELIX VOLTAGE	900	1000	VDC
HELIX CURRENT	--	10.0	MA DC
ANODE VOLTAGE	50	300	VDC
ANODE CURRENT	--	0.1	MA DC
COLLECTOR VOLTAGE *	900	1000	VDC
COLLECTOR CURRENT	--	40.0	MA DC
GRID VOLTAGE	50	125	VDC
GRID CURRENT	--	15.0	MA DC
GRID VOLTAGE (CUT-OFF)	--	-20	VDC
ALL VOLTAGES ARE REFERENCED TO THE CATHODE. ALL CURRENTS ARE SPECIFIED AT PEAK VALUES.			
<u>R.F. SPECIFICATIONS</u>			
POWER OUTPUT (PEAK)	33	--	DBM
SMALL SIGNAL GAIN	30	--	DB
SATURATED GAIN	30	--	DB
OUTPUT SIGNAL ATTENUATION (CUT-OFF)	70	--	DB
V.S.W.R. (INPUT/OUTPUT)	--	2:1	--
NOISE FIGURE	--	30	DB
INPUT R.F. POWER	--	1	WATT
CATHODE PRE-HEATING	60	--	SEC
DUTY CYCLE	--	0.1	--

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE (OPERATING) - 0°C TO +50°C

RELATIVE HUMIDITY (OPERATING) - UP TO 80%, DUE TO CONDENSATION AND TO TEMPERATURE CHANGE

BAROMETRIC PRESSURE (OPERATING) - FROM 28 TO 20.4 INCHES OF MERCURY, (0 TO 10,000 FEET)

TEMPERATURE (STORAGE) - -35°C TO +70°C

RELATIVE HUMIDITY (NON-OPR.) - SAME AS FOR OPERATING CONDITION.

BAROMETRIC PRESSURE (NON-OPR.) - FROM 28 TO 7.0 INCHES OF MERCURY, (0 TO 35,000 FEET)

SHOCK (NON-OPR.) - FORCE OF 10G, WITH A TIME DURATION OF 11 ±1 MILLISECONDS.

VIBRATION (NON-OPR.) - 2G, 10 TO 500 CPS. 0.40 INCHES DA, 5 TO 10 CPS.

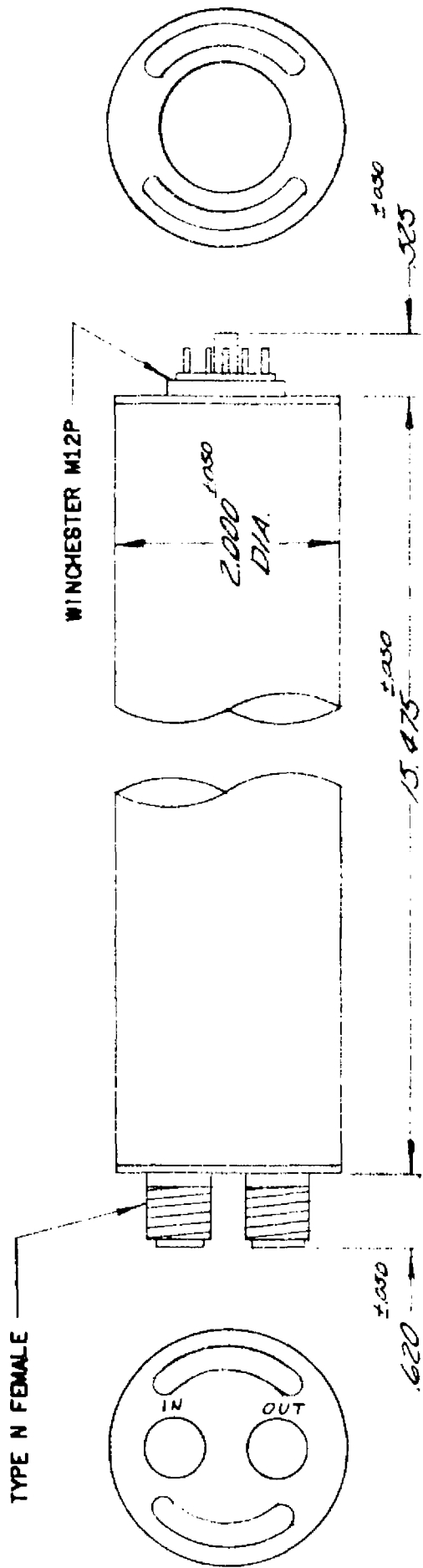
MECHANICAL DATA, GENERAL

PHYSICAL DIMENSIONS	-	SEE FIGURE 1
MOUNTING POSITION	-	ANY
COOLING	-	NOT REQUIRED
INPUT/OUTPUT IMPEDANCE (RF)	-	50 OHMS
R.F. CONNECTORS	-	TYPE N FEMALE
WEIGHT (APPROX.)	-	6 POUNDS

- * THE COLLECTOR IS CONNECTED INTERNALLY TO THE TUBE CAPSULE AND MUST BE GROUNDED FOR SAFE OPERATION.

FIGURE 1

8258



POWER CONNECTIONS

PIN 8 - GRID

D - CAPSULE COLLECTOR GROUND

F - HEATER CATHODE

H - HEATER

J - CATHODE

L - HELIX

N - ANODE

MATERIALS AND FINISHES

CAPSULE --- BRUSH CHROME PLATED STEEL

END CAPS -- BLACK ANODIZED ALUMINUM

MARKING

ANODE VOLTAGE, HELIX VOLTAGE, PEAK GRID VOLTAGE, AND
CATHODE CURRENT PERMANENTLY MARKED ON THE TUBE CAPSULE.
IN AND OUT ARE PERMANENTLY MARKED ON THE R.F. END
CAP.

MANUFACTURERS NAME, TRADEMARK OR CODE SYMBOL, AND
PART NUMBER.