

**MECHANICAL**

Maximum Dimensions (4KM50SJ and H-158 Electromagnet)

Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33 inches
Diameter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18 inches
Weight (4KM50SJ)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90 pounds
Weight (H-158 Electromagnet)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170 pounds
Input Coupling (rf)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Type N Coaxial
Output Coupling (rf)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UG435A/U Flange
Maximum Tuner Start Torque	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70 in-oz
Maximum Tuner Stop Torque	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30 in-lbs
Mounting Position Preferred	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	vertical, cathode down
Cooling: Water and Forced Air																	

Flow Rate Pressure Drop

Cathode	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 cfm free
Body	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2 gpm 50 psi
Collector	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18 gpm 30 psi
Electromagnet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5 gpm 15 psi

ELECTROMAGNET POWER SUPPLY REQUIREMENTS

Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150 volts
Current	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15 amperes

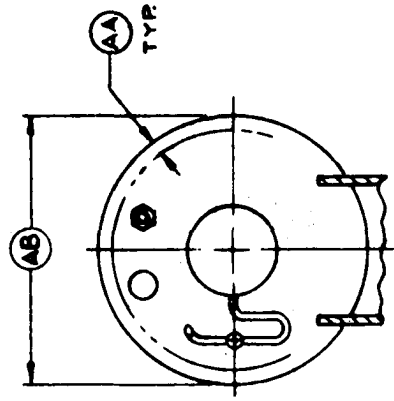
MAXIMUM RATINGS

BEAM VOLTAGE (dc)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 KILOVOLTS
BEAM CURRENT (dc)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 AMPERES
BEAM INPUT POWER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50 KILOWATTS
BODY CURRENT (dc)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75 MILLIAMPERES
COLLECTOR DISSIPATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50 KILOWATTS
LOAD VSWR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5:1
INLET WATER PRESSURE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80 PSIG
OUTLET WATER TEMPERATURE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80 DEGREES C

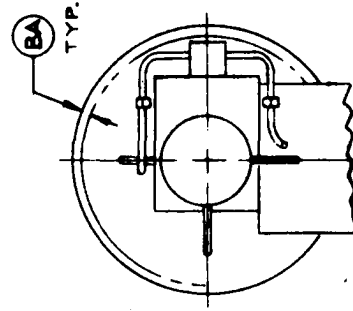
TYPICAL OPERATION

	<i>High Eff. Tuned</i>		<i>Broadband Tuned</i>	
Frequency	-	-	-	-
Output Power	-	-	-	-
Driving Power	-	-	-	-
Gain	-	-	-	-
Beam Voltage	-	-	-	-
Beam Current	-	-	-	-
Modulating Anode Voltage (to cathode)	-	-	-	-
Beam Power Efficiency	-	-	-	-
Half Power Bandwidth	-	-	-	-
Body Current	-	-	-	-
Electromagnet Current	-	-	-	-

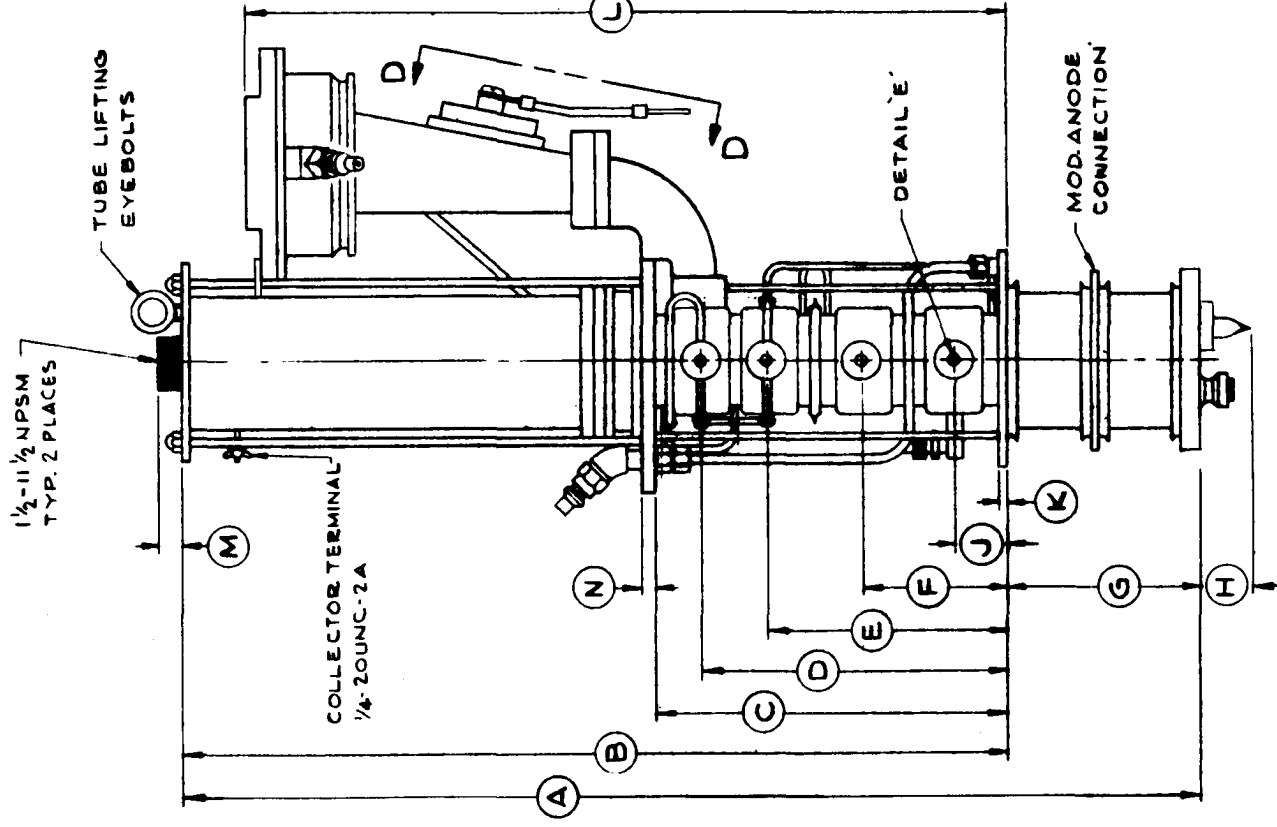
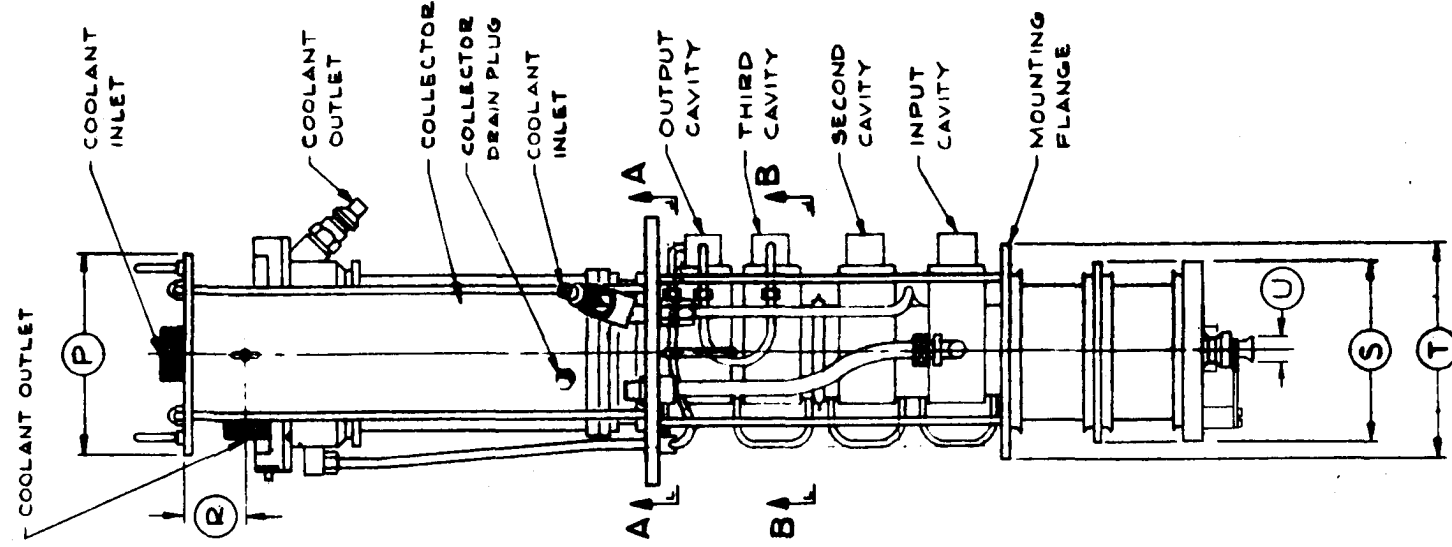
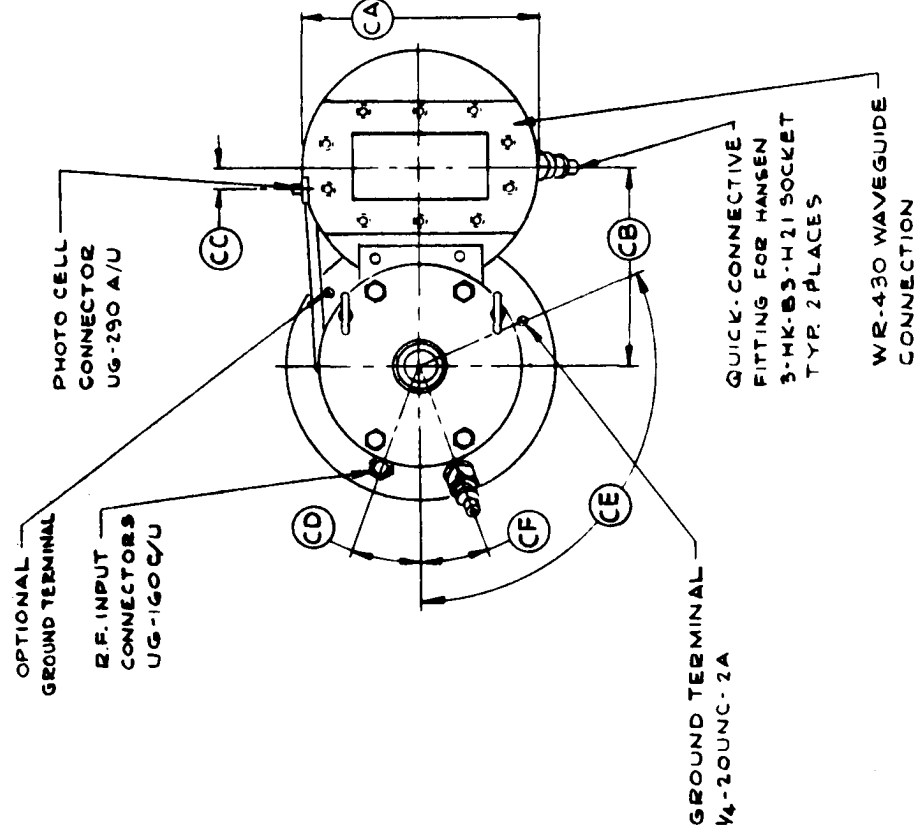
For additional information or information regarding a specific application, write to Eitel-McCullough, Inc., 301 Industrial Way, San Carlos, California.



SECTION A-A

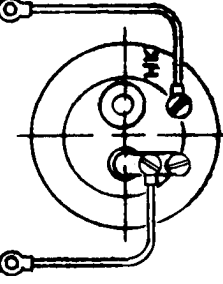


SECTION B-B
TUNER EXTENDED
TO MAX. LIMIT



RED LEAD 14 ± 1/2 LONG
1/4 LUG-HEATER

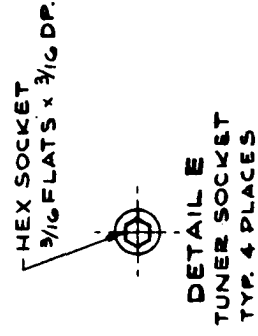
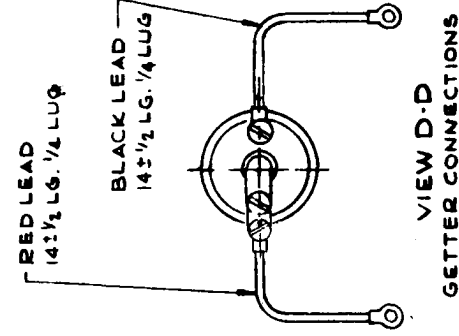
BLACK LEAD 14 ± 1/2 LONG
1/4 LUG-HEATER-CATHODE

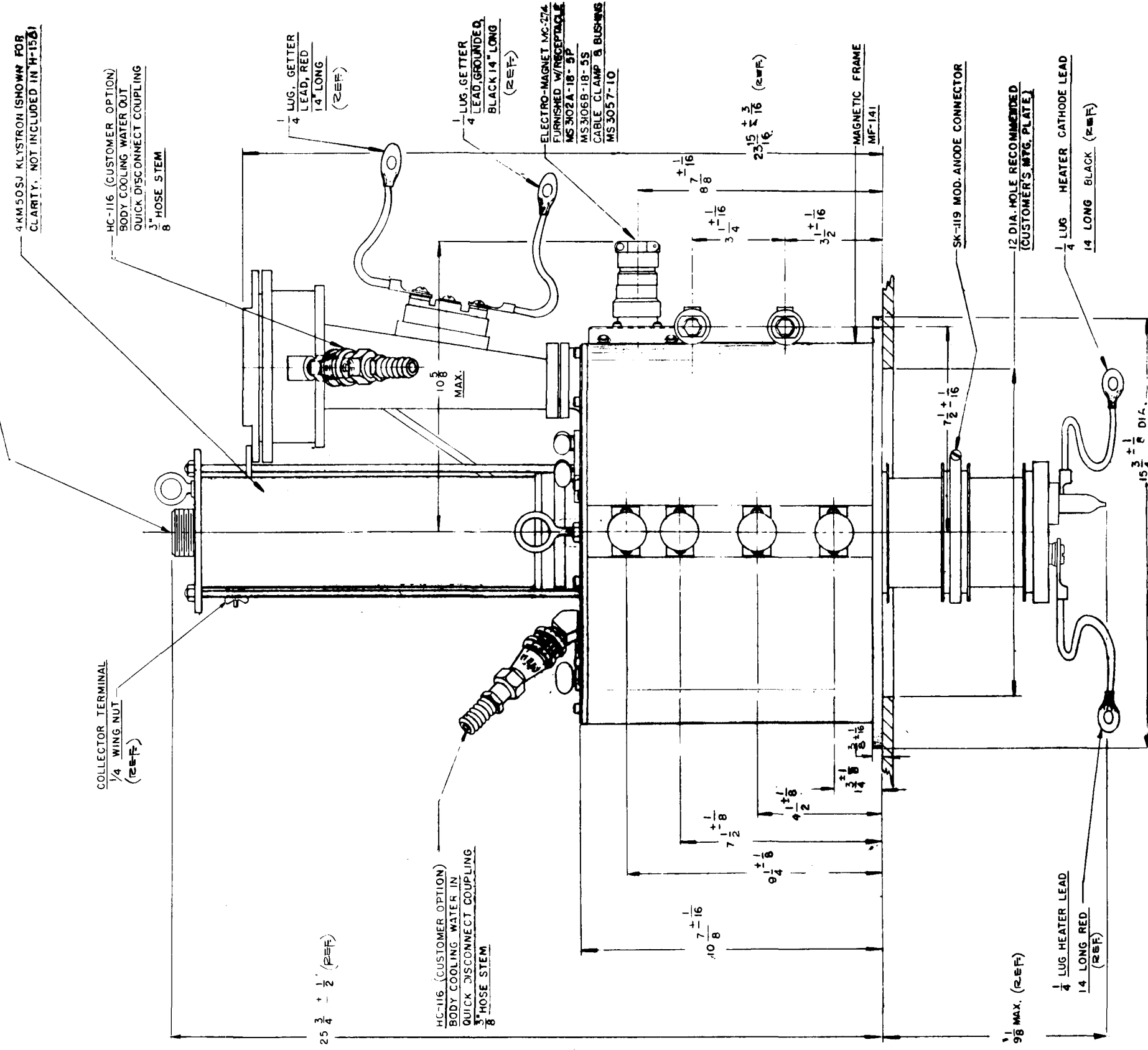
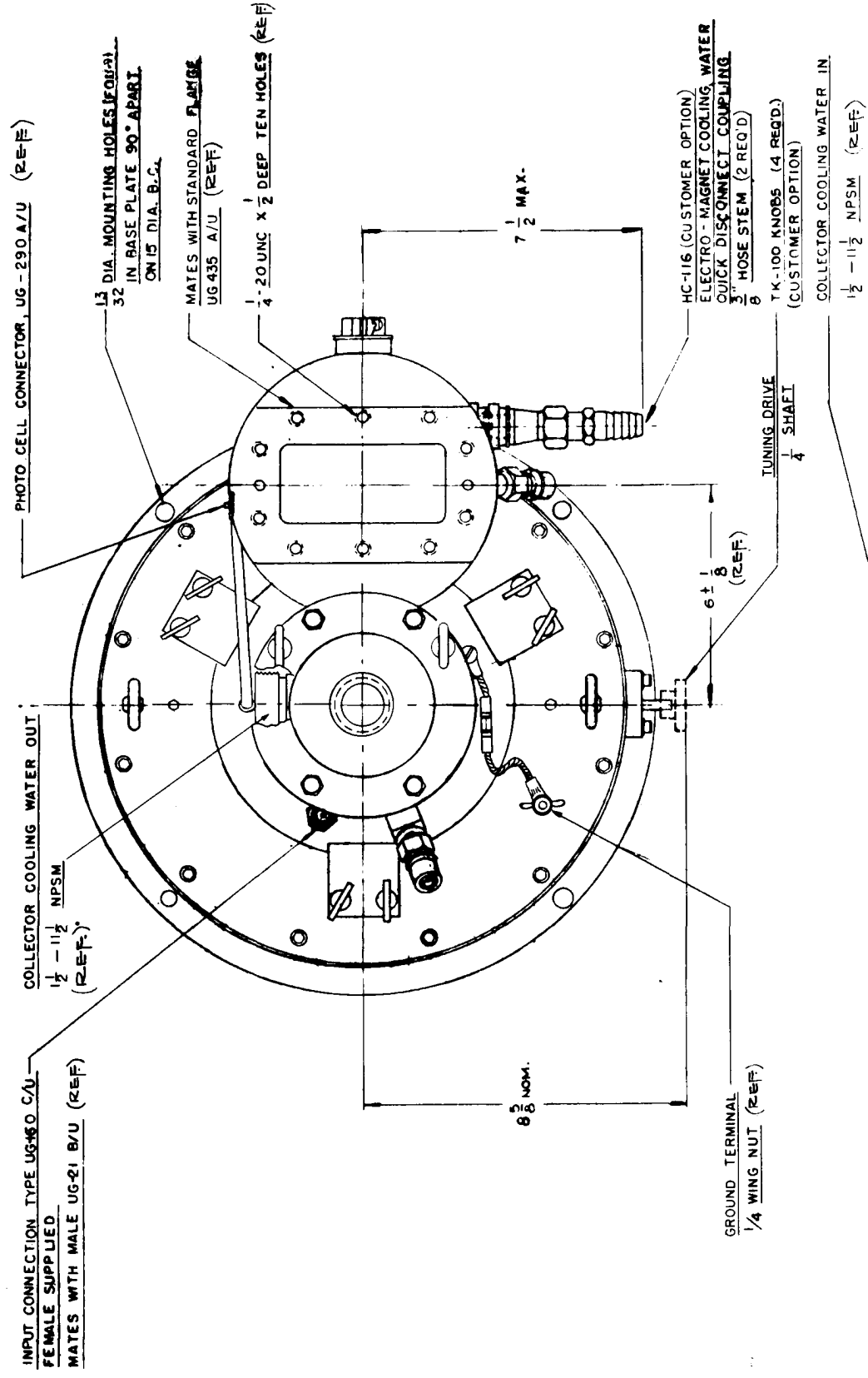


FILAMENT CONNECTIONS

4KM50SJ KLYSTRON

DIMENSIONAL DATA			
REF	NOM.	MIN.	MAX.
A	30.366		
B	24.670		
C		10.325	10.525
D	9.125		
E	7.375		
F	4.388		
G	5.696		
H	2.188		
J	1.688		
K		.230	.270
L		23.600	24.000
M			1.000
N		.345	.405
P		5.950	6.050
R		1.470	1.720
S			5.280
T		6.490	6.500
U			1.188
AA		.437	
AB		7.990	8.000
BA		.380	
CA		6.970	7.030
CB		5.750	6.250
CC		.510	.610
CD		15°	25°
CE		110°	120°
CF		15°	25°





H-158 ELECTROMAGNET AND KLYSTRON SUPPORTING STRUCTURE