from JETEC release #1548, Dec. 12, 1955

ADVANCE DATA

MECHANICAL DATA

Mounting	Cathode Vertical
Overall Dimensions	12 1/2 X 6 1/16 X 5 1/16
Net Weight	33 Lbs. Approx.
Cooling	Forced Air
Pressurization	50 psig maximum air or its equivalent pressure of sulfur hexafluoride (SF6) must be used in the waveguide to insure that no electrical breakdown occurs. Recommended minimum pressure of 40 psig air or its equivalent SF6 in a smooth waveguide.
Output Coupling	RG-96/U Waveguide
Vibration (non-operating)	50 Cycles - 10 G

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage-Preheat	6.0 ± 5% Volts
Heater Current at 5.0 Volts	1.8 - 2.4 Amps
Minimum Preheat Time	4 Minutes
Heater Power During Operation	(Note 1)

RATINGS (Absolute Maximum) [2]

Heater Voltage	7.0 Volts
Peak Current	40 Amps
Peak Anode Voltage	20 Kv
Average Power Input	160 Watts
Maximum Frequency Pulling at VSWR 1.5/1	50 Mc
Anode Temperature	130° C
Maximum Pulse Duration	0.5 us
Maximum Duty Cycle	.00035
Minimum Pulse Voltage Rise Time	0.05 us
Maximum VSWR	1.5/1
R F Bandwidth	3.0/tp Mc

TYPICAL OPERATION

	Oscillator 1	Oscillator 2	
Pulse Recurrent Frequency	1000	2000	pps
Pulse Duration	0.25	0.10	us
Peak Anode Voltage	19	19	Kv
Peak Anode Current	28	30	Amps
Average Anode Current	7	6	Ma
Useful Range of Average Current	5-7	5.5-8	Ma
Average Power Output	26	21	Watts
Input Capacitance	7.55		uuf

QUICK REFERENCE DATA

Sylvania Type 6799 is a high power, pulsed, fixed frequency (34512-35208 Mc) magnetron. The unit is supplied with magnet in place.

SYLVANIA ELECTRIC PRODUCTS INC.

ELECTRONICS DIVISION
WOBURN, MASS.

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

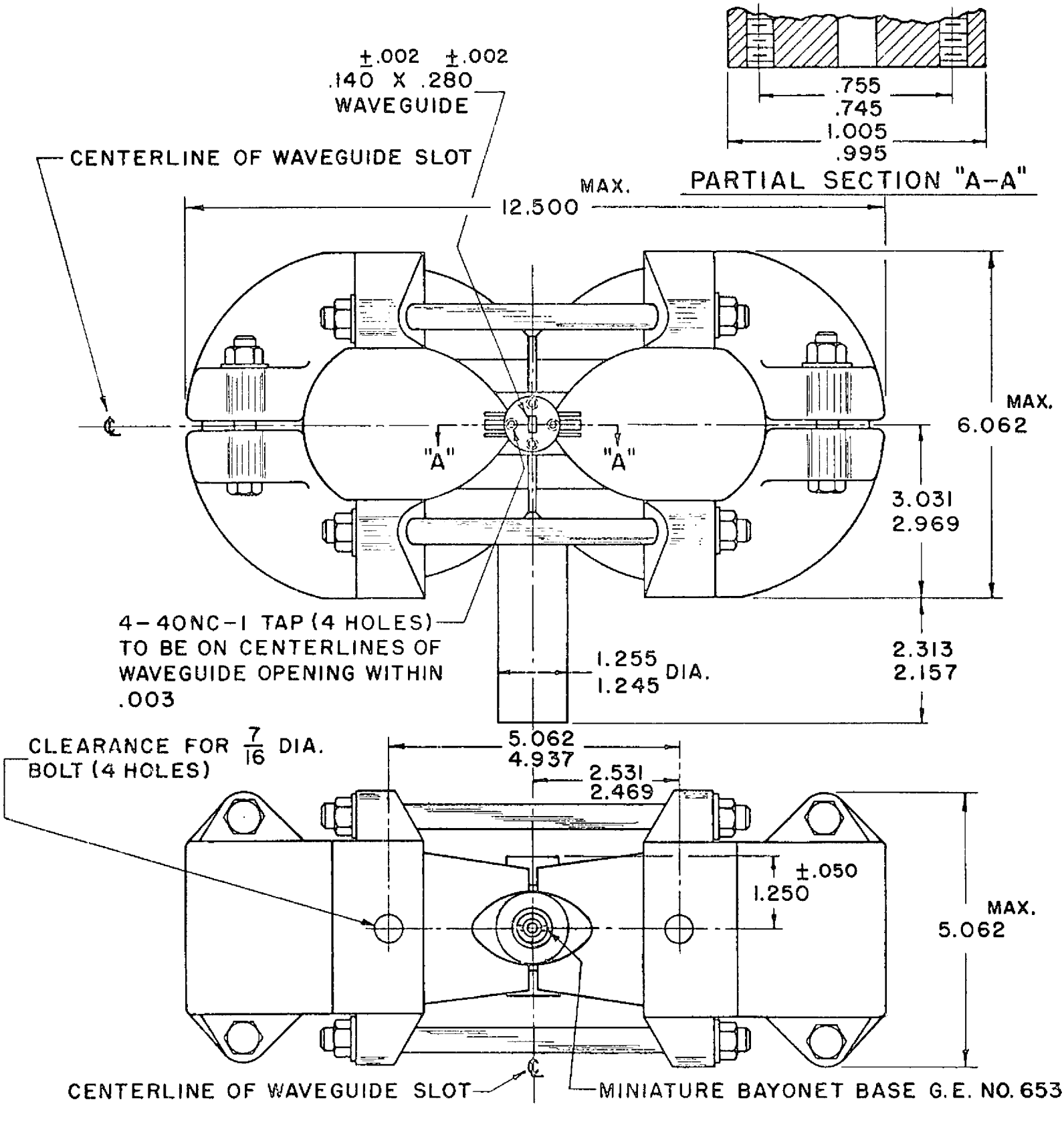
Nov. 8, 1955

NOTES:

1. During operation, reduce heater power in accordance with the following formula:

$$E_f = 5.0\ (1 - \frac{I_b}{5})\ \text{volts, where } I_b \text{ is in ma,}$$
$$\text{for } I_b \leq 5 \text{ ma}$$
$$E_f = 0 \text{ for } I_b > 5 \text{ ma}$$

2. The values specified are based on the "absolute system" and are not to be exceeded under any service conditions. The ratings are limiting values above which serviceability of any individual tube may be impaired. It does not necessarily follow that combinations of absolute maximum ratings can be attained simultaneously.


±.002 ±.002
.140 X .280
WAVEGUIDE
CENTERLINE OF WAVEGUIDE SLOT
.755
.745
1.005
.995
PARTIAL SECTION "A-A"
MAX.
12.500
MAX.
6.062
"A"
"A"
3.031
2.969
4-40NC-1 TAP (4 HOLES)
TO BE ON CENTERLINES OF
WAVEGUIDE OPENING WITHIN
.003
1.255
1.245 DIA.
2.313
2.157
CLEARANCE FOR 7/16 DIA.
BOLT (4 HOLES)
5.062
4.937
2.531
2.469
±.050
1.250
MAX.
5.062
CENTERLINE OF WAVEGUIDE SLOT
MINIATURE BAYONET BASE G.E. NO. 653