

Sylvania

T E N T A T I V E

TYPE 3J31

Pulse Type Magnetron

External Magnet

PHYSICAL SPECIFICATIONS

Cathode: Coated Unipotential

Dimensions: As Per Outline

Mounting Position: Any

Cooling: Forced Air

Finish: Metal Surface to
be Painted Except
for Back Surface
of Base Plate and
Wave Guide Surface
of Output Flange.

Ratings and Characteristics

Heater Voltage (ac or dc)	6.0 ± 0.5	V
Heater Current	1.9 ± 0.2	A
Minimum Cathode Heating Time	120	sec
Maximum Peak Anode Voltage	16	kv
Maximum Peak Anode Current	16	a
Maximum Peak Input Power	225	kw
Maximum Average Input Power	105	W
Maximum Duty Cycle*	0.0006	
Maximum Anode Temperature	125°	C
Maximum Operating Frequency	24,176	Mc
Minimum Operating Frequency	23,792	Mc
Maximum Frequency Pulling (VSWR = 1.5)	30	Mc
Maximum Magnetic Field Strength	8,000	H

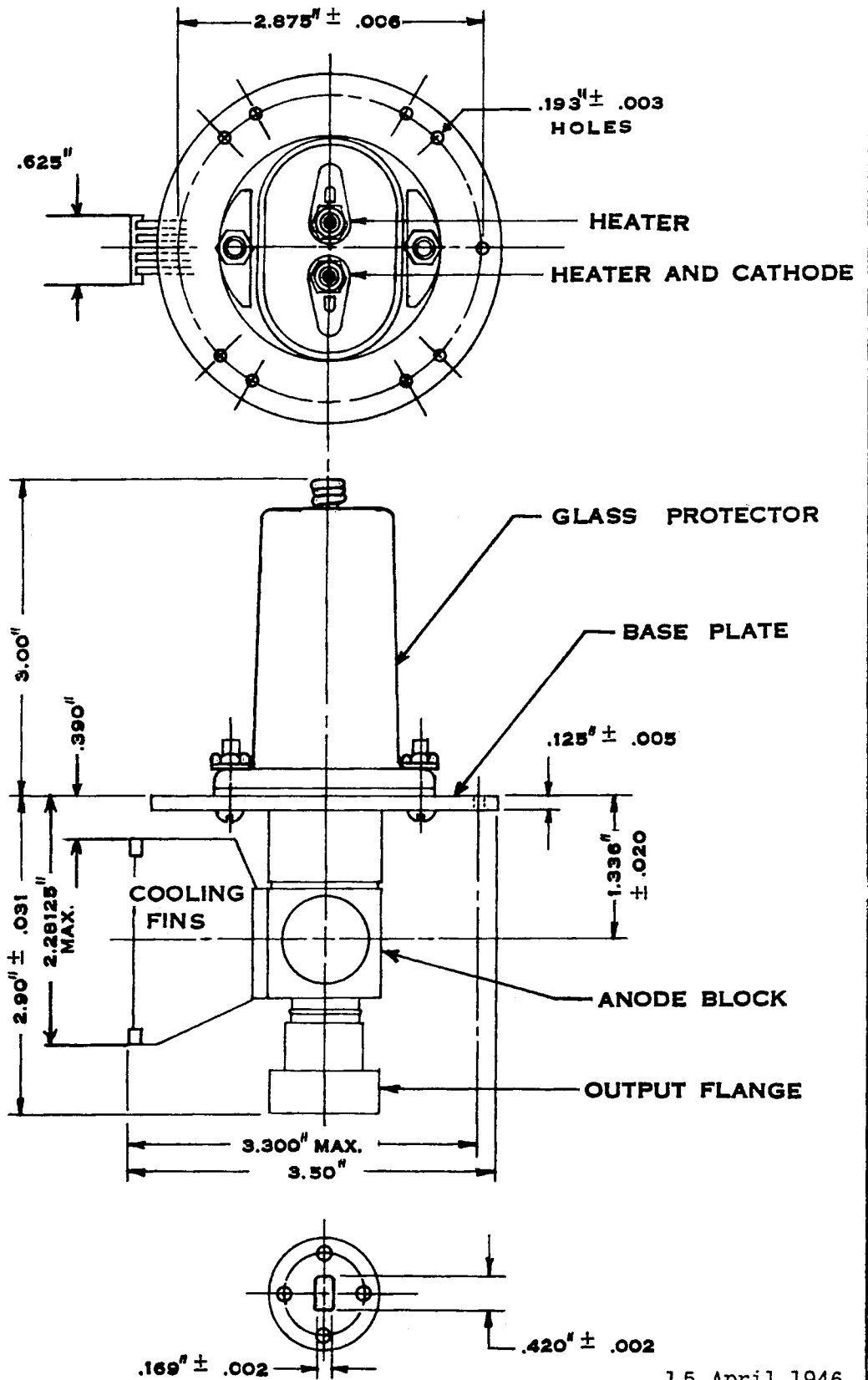
Typical Operating Conditions and Characteristics

Heater Voltage (ac or dc) (to start)	6.0	V
Heater Voltage (ac or dc) (to run)	1.3	V
Peak Anode Voltage	13.75	kv
Peak Anode Current	12.0	a
Average Anode Current	7.0	mAdc
Peak Power Output	40	kw
Minimum Average Power Output	15.0	W
Pulse Duration	0.25	us
Pulse Repetition Rate	2000	pps
Magnetic Field Strength (Internal)	7600	H

* In any 100 microsecond interval, the tube shall not be operated longer than 1.0 microsecond.

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SYLVANIA ELECTRIC PRODUCTS INC.
 OUTLINE DRAWING
 TYPE 3J31



15 April 1946