

DESCRIPTION:

The Sylvania 2J55 is a fixed frequency (centered at 9375 mc.) pulsed magnetron featuring a compact construction, high stability, and adaptability to a wide range of applications in the X-Band.

Typical applications are search and navigational radars.

*MAXIMUM RATINGS:

Filament voltage	6.3—10%
Peak Anode Voltage	16 kv.
Av. Power Input	180 watts
Duty Cycle	.001
Pulse Duration	2.5 μ sec.

*The above ratings are not intended to be applied simultaneously; they represent maximum values for each parameter and should serve as a guide to the system designer.

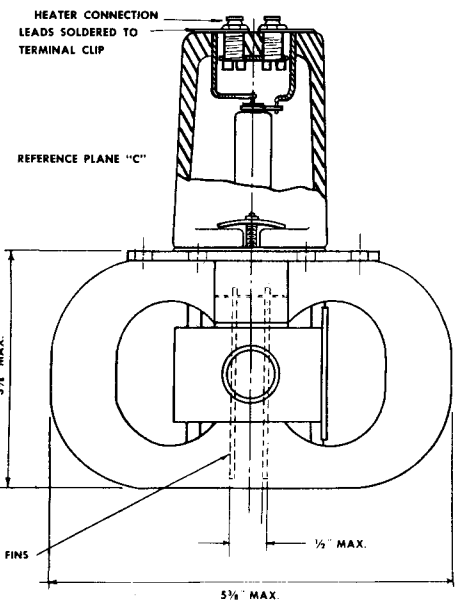
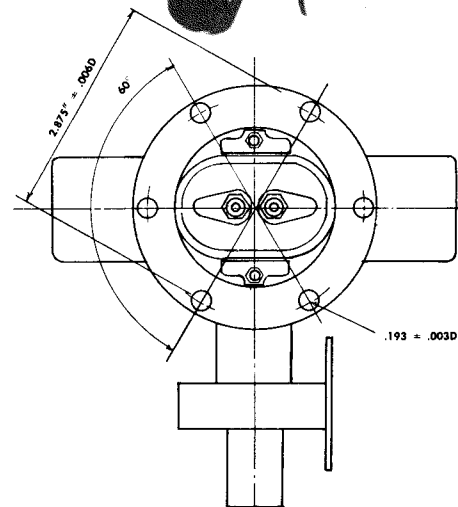
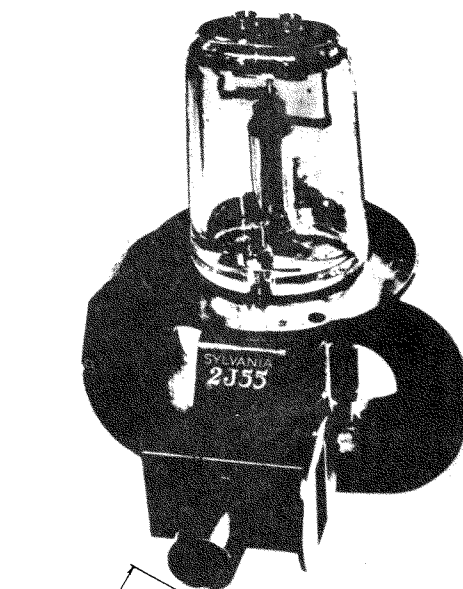
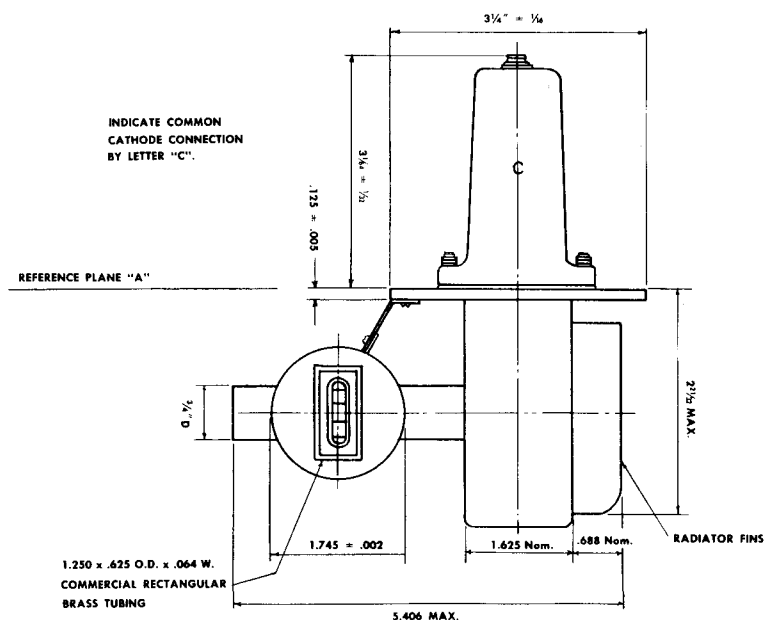
TYPICAL OPERATING CONDITIONS:

Warm-up Time	120 sec.
Filament Voltage	** 0
Pulse Repetition Rate	1.0 μ sec.
Peak Anode Voltage	12 kv.
Peak Anode Current	12 amp.
Peak Power Output	45 kw.

**6.3 volts applied during warm-up

$$E_f = 6.3 \sqrt{1 - \frac{P_i}{150}}$$

Therefore $E_f = 0$ if P_i is greater than 150.



2J55 Rieke Diagram

$i_{av} = 12 \text{ ma.}$
Pulse width = 1 μs
Duty Cycle = .001
Double Line Indicates
Flange Position

