



**RADIO MANUFACTURERS ASSOCIATION  
ENGINEERING DEPARTMENT**

Release No. 418

June 30, 1945

RMA TYPE  
7BP1  
CATHODE RAY TUBE

sponsor:  
General Electric Co.

Electrical

Focusing Method - Magnetic  
Deflecting Method - Magnetic  
Maximum solid deflecting Angle - 55 Degrees  
Phosphor - P1  
Direct Interelectrode Capacitances

	<u>Minimum</u>	<u>Maximum</u>	
Cathode to all other electrodes	3	10	uuf
Grid No. 1 to all other electrodes	6	11	uuf
Grid No. 2 to all other electrodes	3	12	uuf

Mechanical

Over-all Length	13 $\frac{1}{4}$ $\frac{1}{2}$	3/8	Inches
Greatest Diameter of Bulb	7 $\frac{1}{2}$	1/8	Inches
Minimum Usable Screen Diameter		6	Inches
Base - Wafer Octal 8-pin, sleeve			
Basing - RMA 5AN			
Bulb Contact - Snap Terminal			
Spot Center *15 mm Radius			

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

	<u>Typical Operation</u>		<u>Maximum Ratings</u>	
Heater Voltage†			6.3	Volts
Heater Current			0.6	Amperes
High Voltage Electrode	4000	7000	7700	Volts
Grid No. 1 (Control Electrode) Voltage	-50 $\frac{1}{2}$ 50%†	-50 $\frac{1}{2}$ 50%†	Never	Positive
Grid No. 2 (Accelerating Electrode)				
Voltage	250	250	750	Volts
Grid No. 2 Current, maximum	10	10		Microamperes
D-c Heater-Cathode Potential‡			-125	Volts
Grid Circuit Resistance			1.5	Megohms

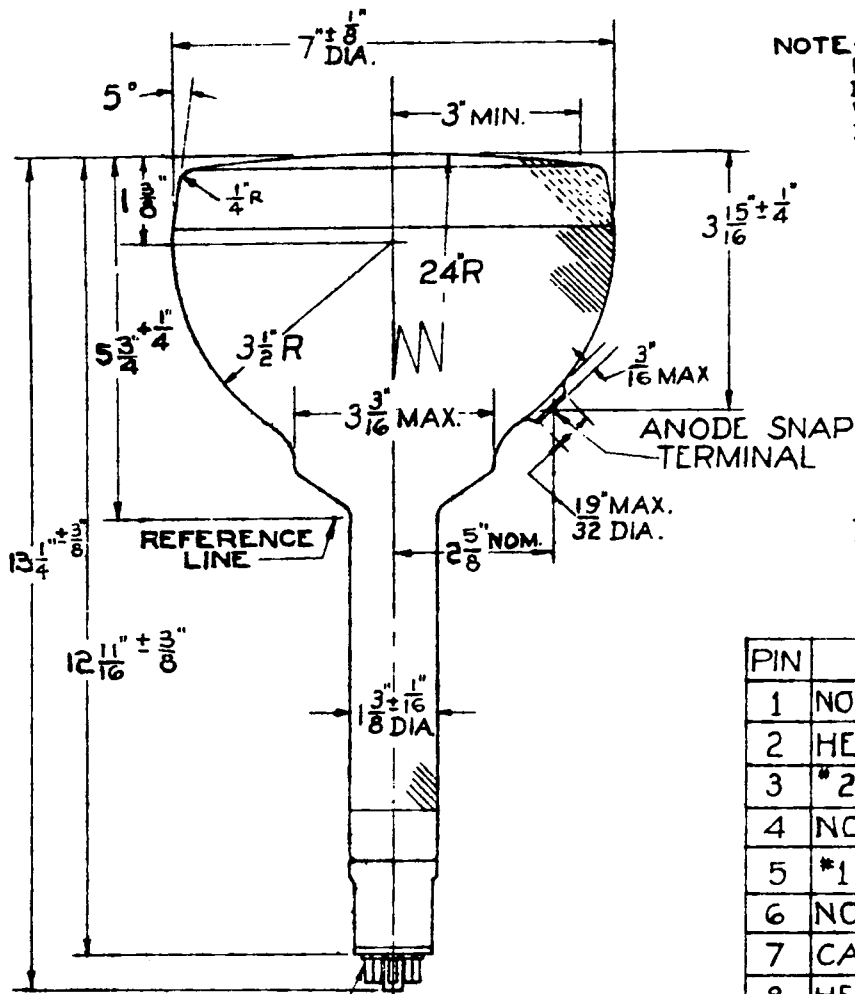
\* The center of the undeflected unfocused spot will fall within a circle of given radius concentric with the tube face.

† Heater voltage and heater current allowable variation  $\frac{1}{2}$  10 per cent.

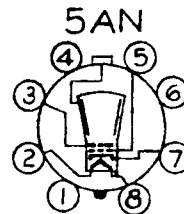
‡ Cutoff voltage which is necessary for visual extinction of a stationary focused spot.

¶ With heater negative. Cathode should be connected to the midtap or to one side of heater supply.

# RMA TYPE 7BPI



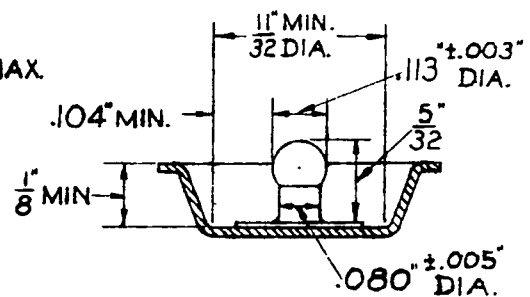
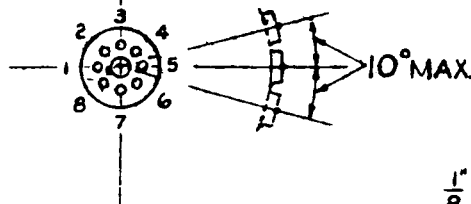
NOTE: REFERENCE LINE IS DETERMINED BY A POINT WHERE A GAUGE 1.430 ± .003" DIA. AND 2" LONG WILL STOP AGAINST BULB BODY.



BASING DIAGRAM

PIN	CONNECTION
1	NO CONNECTION
2	HEATER
3	*2 GRID
4	NO CONNECTION
5	*1 GRID
6	NO CONNECTION
7	CATHODE
8	HEATER

OCTAL 8 PIN  
 BASE



ENLARGED VIEW OF  
 SNAP TERMINAL