

RMA Release No. 380
June 15, 1944

Type 12GP7

Focusing Method
Deflecting Method
Phosphor
Direct Interelectrode Capacitances

Electrostatic
Electrostatic
P7

Bulb Contact Medium Metal Cap
Bulb Contact Alignment
Anode No. 3 contact aligns with D1-D2 trace + 10 degrees
Spot Center* 35 mm Square

Typical Operation	Maximum Ratings
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Heater Voltage	6.3	Volts
Heater Current	0.6	Amp

	<u>Typical Operation</u>				<u>Maximum Ratings</u>
Anode No. 1 (Focusing Electrode) Voltage	857 #	857 #	1143 #	1143	+ 25% # -30% 2200 Volts
Anode No. 2 (High Voltage Electrode) Voltage	3000	3000	4000	4000	4400 Volts
Anode No. 3 (Supplementary High Voltage Electrode) Voltage	3000	6000	4000	6000	6600 Volts
Grid No. 1 (Control Electrode) Voltage	-98 ¶	-98 ¶	-130 ¶	-130	± 50% ¶ Never Positive
Peak Voltage Between Anode No. 2 and Any Deflecting Electrode Ⓢ					1100 Volts
D-c Heater Cathode Potential §					-250 Volts
Impedance of Any Deflecting Electrode Circuit at Heater Supply Frequency					1.0 Megohms
Grid Circuit Resistance					1.5 Megohms
Deflection Factor					
Electrodes D1 and D2	73	89	97	108	± 20% Volts D-c/in
Electrodes D3 and D4	68	83	91	101	± 20% Volts D-c/in

* The undeflected focused spot will fall within a square of the given size centered at the geometric center of the tube face and having one side parallel to the trace produced by D1 and D2.

∕ Heater voltage and heater current allowable variation ± 10%.

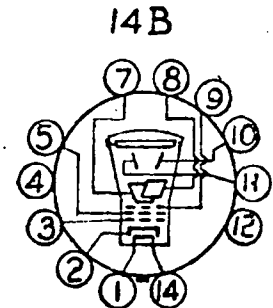
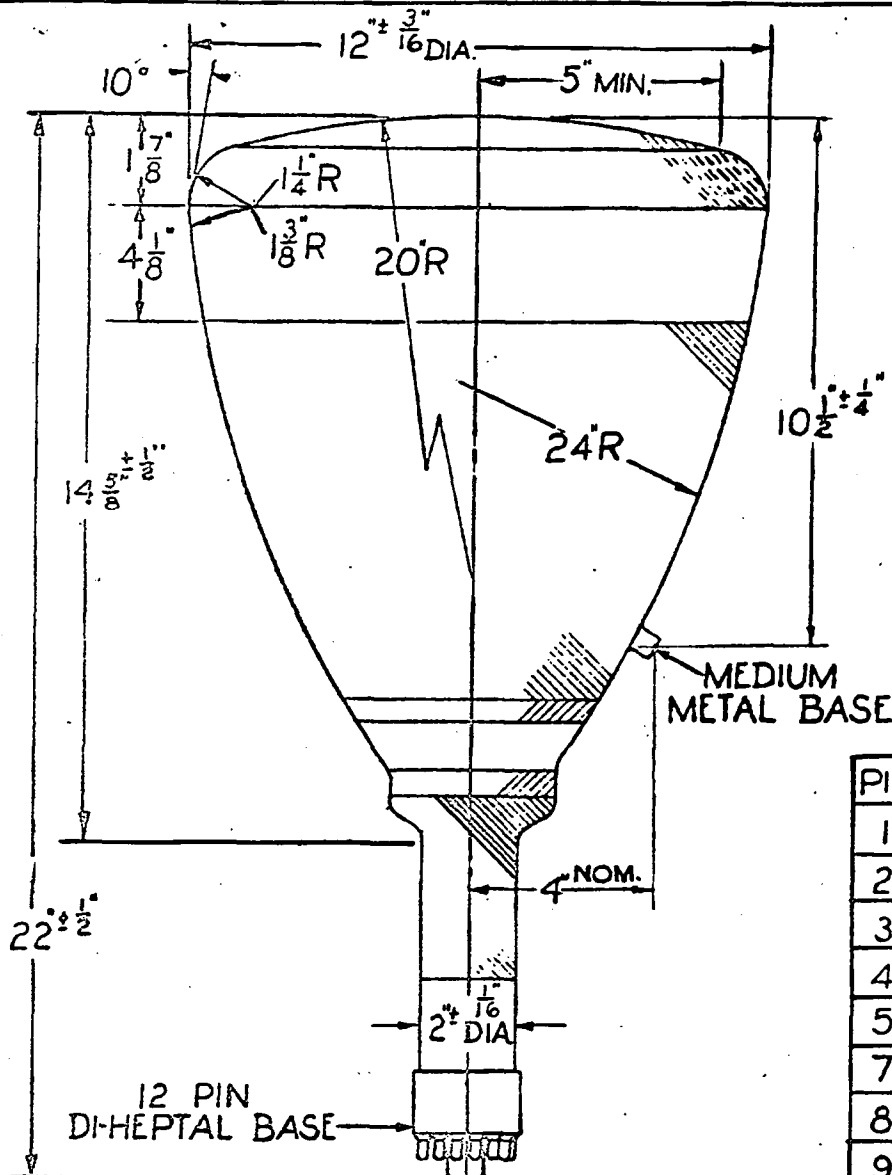
Ⓢ Symmetrical deflection voltage must be used.

§ With heater negative. Cathode should be tied to midtap or to one side of heater supply.

Nominal voltage taken at 75% of grid voltage for cutoff. Tolerances refer to variations of focusing voltage with grid voltage between 0 and cutoff.

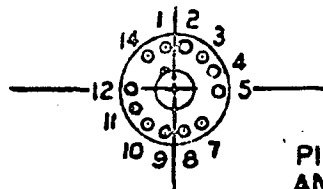
¶ Cutoff voltage which is voltage necessary for visual extinction of a stationary focused spot.

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BOTTOM VIEW OF
SOCKET CONNECTION

PIN	CONNECTIONS
1	HEATER
2	CATHODE
3	GRID
4	INTERNAL CONNECTION
5	#1 ANODE
7	DEFLECTING ELECTRODE D3
8	DEFLECTING ELECTRODE D4
9	#2 ANODE
10	DEFLECTING ELECTRODE D2
11	DEFLECTING ELECTRODE D1
12	INTERNAL CONNECTION
14	HEATER



PIN NO.5 ALIGNS WITH TRACE ID2 WITHIN $\pm 10^\circ$
ANODE TERMINAL ALIGNS WITH ID2
TRACE WITHIN $\pm 10^\circ$

OUTLINE 12GP7 CATHODE-RAY TUBE