ELECTRON TUBE DEPARTMENT ■ COMPONENTS DIVISION
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION, CLIFTON, NEW JERSEY

TENTATIVE

DESCRIPTION:

THE FW-208 IS A 7.5 INCH IATRON (DIRECT VIEW STORAGE CATHODE-RAY TUBE) THAT PRODUCES A BRIGHT VISUAL DISPLAY OF ELECTRICALLY STORED INFORMATION. IT IS ELECTROMAGNETICALLY FOCUSED AND DEFLECTED. THE TUBE DISPLAYS BRIGHT IMAGES THAT CAN BE VIEWED IN DIRECT DAYLIGHT, AND FEATURES THE ABILITY TO WRITE, STORE, AND ERASE SIGNAL INFORMATION AT THE WILL OF THE OPERATOR. GREY SHADES ARE PRODUCED IN ACCORDANCE WITH THE AMPLITUDE VARIATIONS OF THE INPUT SIGNAL. THE TUBE HAS TWO ELECTRON GUNS, A WRITING GUN, WHICH WRITES THE INPUT SIGNAL ON A STORAGE MESH, AND A FLOOD GUN WHICH ILLUMINATES THE PHOSPHOR IN ACCORDANCE WITH THE STORED SIGNAL.

GENERAL:

DIMENSIONS	SEE OUTLINE AND FUNCTIONAL SCHEMATIC	
MINIMUM USEFUL DISPLAY DIAMETER	6.0	INCHES
NOMINAL TUBE DIAMETER	7.5	INCHES
PHOSPHOR	P-20	ALUMINIZED
OPERATING POSITION		ANY
CATHODE PRE-HEATING TIME - NOTE 1	30	SECONDS
FOCUS		MAGNETIC
DEFLECTION		MAGNETIC

OPERATING VALUES AND TYPICAL PERFORMANCE CHARACTERISTICS:

	FLOOD SECTION		
VIEWING SCREEN	+10	KV	
BACKING ELECTRODE	+10	VDC	
COLLECTOR	+150	VDC	
ANODE #4	+75	VDC	
ANODE #3	+10 TO +30	VDC	ADJUSTABLE SEE NOTE 2
ANODE #2	0 TO +80	VDC	ADJUSTABLE INTERNALLY CONNECTED TO GRID #2 SEE NOTE 2
ANODE #1	+60	VDC	
CATHODE	0		
HEATER	6.3	V	1.4 AMPERES NOMINAL AC OR DC

* TRADEMARK OF THE INTERNATIONAL TELEPHONE & TELEGRAPH CORPORATION

WRITING SECTION

CATHODE	-2500	VDC
GRID #1 CUTOFF	-30	VDC RESPECT CATHODE SEE NOTE 3
GRID #2	0 TO +80	INTERNAL CONNECTION TO ANODE #2
HEATER - SEE NOTE 4	6.3	VOLTS .6 AMPERES NOMINAL AC OR DC
RESULUTION - SEE NOTE 5		
125 FT. LAMBERTS	80	LINES PER INCH
625 FT. LAMBERTS	55	LINES PER INCH
1000 FT. LAMBERTS	40	LINES PER INCH
BRIGHTNESS	1250	FT. LAMBERTS
WRITING SPEED		
WRITING TO 50% BRIGHTNESS	40000	INCHES PER SECOND - SEE NOTE 6
VIEWING TIME - SEE NOTE 7	60	SECONDS MINIMUM
ERASE TIME - SEE NOTE 8	30	MILLISECONDS

NOTES:

1. MINIMUM TIME RECOMMENDED FOR CATHODE WARM-UP BEFORE OPERATING VOLTAGES ARE APPLIED.

2. ADJUST FOR BEST COLLIMATION OF FLOOD BEAM.

3. VISUAL CUTOFF OF FOCUSED, UNDEFLECTED, STORED SPOT.

4. HEATER TRANSFORMER CENTER TAP SHOULD BE CONNECTED TO CATHODE VOLTAGE.

5. RESOLUTION MEASURED BY THE SHRINKING RASTER METHOD AT THE CENTER OF TUBE.

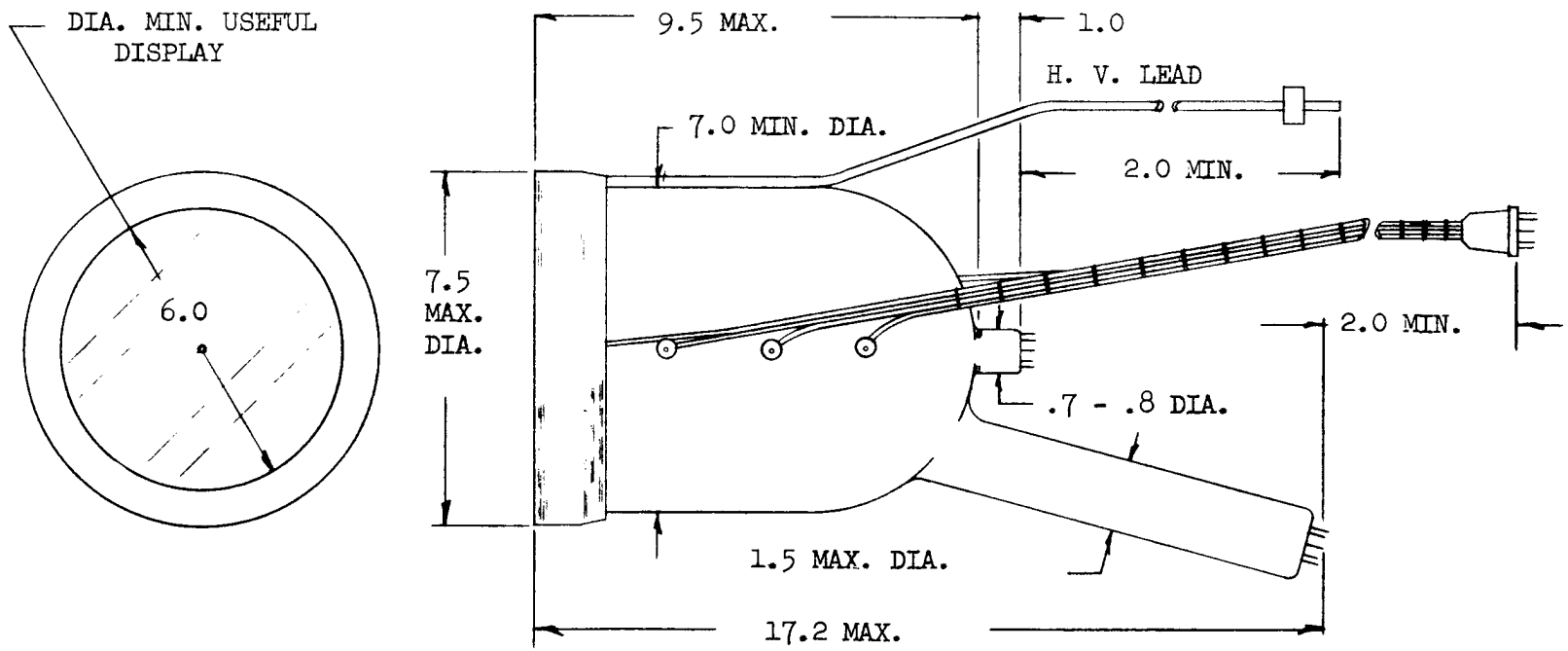
6. MEASURED WITH 25 VOLTS VIDEO DRIVE ABOVE 1/2 UA BEAM CURRENT BIAS LEVEL.

7. VIEWING TIME IS THE TIME THAT A SIGNAL STORED AT MAXIMUM BRIGHTNESS ANYWHERE IN THE DISPLAY CAN BE VIEWED WITH ERASE PULSES BEING CONTINUOUSLY APPLIED TO COUNTERACT POSITIVE ION CHARGING OF THE STORAGE SURFACE.

8. ERASE TIME IS THE SHORTEST TIME THAT INFORMATION CAN BE REMOVED AFTER BEING STORED AT FULL BRIGHTNESS.

ADDITIONAL INFORMATION FOR SPECIFIC APPLICATIONS CAN BE OBTAINED FROM THE

ELECTRON TUBE APPLICATIONS SECTION
ITT COMPONENTS DIVISION
POST OFFICE BOX 412
CLIFTON, NEW JERSEY



	FLOODING GUN BASE		WRITING GUN BASE		7 PIN MINIATURE
PIN	1. ANODE 1	PIN	1. GRID 1	PIN	1. BACKING ELECTRODE (GREEN)
	2. NO CONNECTION		2. NO CONNECTION		2. NO CONNECTION
	3. HEATER		3. HEATER		3. ANODE 2 (YELLOW)
	4. HEATER		4. HEATER		4. ANODE 3 (BLUE)
	5. ANODE 1		5. NO CONNECTION		5. ANODE 4 (PURPLE)
	6. NO CONNECTION		6. GRID 2		6. NO CONNECTION
	7. CATHODE		7. CATHODE		7. COLLECTOR (RED)

DIMENSIONAL DRAWING & ELECTRICAL CONNECTIONS

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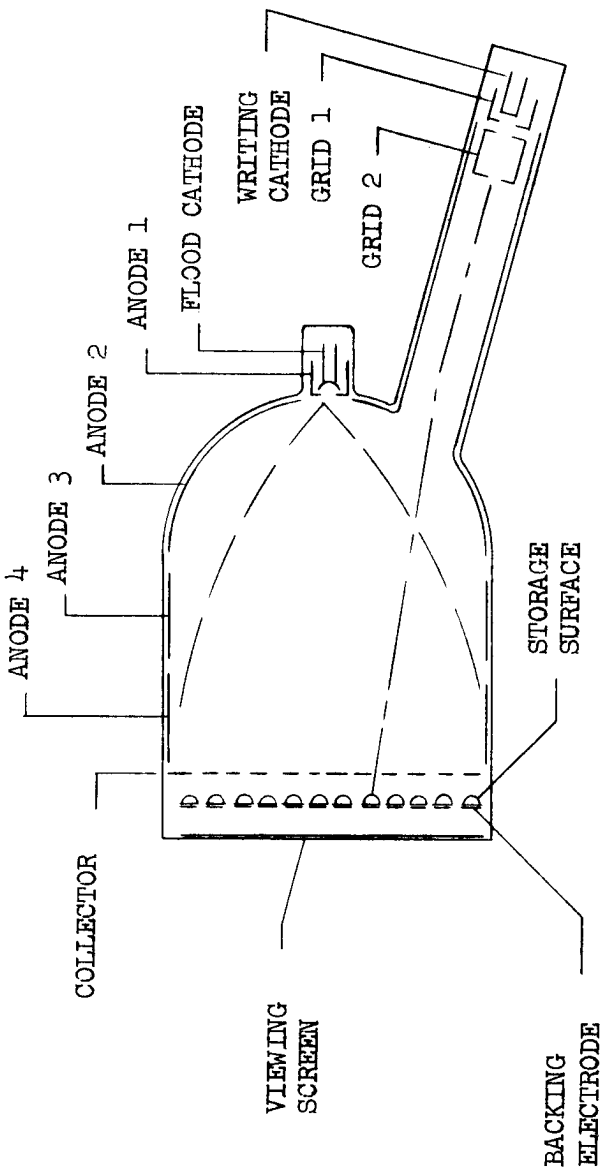

FUNCTIONAL SCHEMATIC

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