Picture Tube

RECTANGULAR GLASS TYPE — **ALUMINIZED SCREEN**
LOW-VOLTAGE ELECTROSTATIC FOCUS — **94° MAGNETIC DEFLECTION**

Low-Grid-No.2-Voltage Type
for Cathode-Drive Operation

GENERAL DATA

Electrical:

Direct Interelectrode Capacitances:		
Cathode to all other electrodes	5	pf
Grid No.1 to all other electrodes	6	pf
External conductive coating to anode	2500 max. / 1700 min.	pf
Heater Current at 6.3 volts	600 ± 30	ma
Heater Warm-Up Time (Average)	11	seconds
Electron Gun	Type Requiring No Ion-Trap Magnet	

Optical:

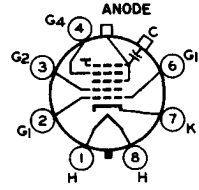
Phosphor (For Curves, see front of this Section)	P4--Sulfide Type, Aluminized
Faceplate	Filterglass
Light transmission (Approx.)	78%

Mechanical:

Weight (Approx.)	27 lbs
Overall Length	17-5/64" ± 5/16"
Neck Length	5" ± 1/8"
Projected Area of Screen	282 sq. in.
External Conductive Coating:	
Type	Regular-Band
Contact area for grounding	Near Reference Line

For Additional Information on Coatings, Dimensions, and Deflection Angles:
See *Picture-Tube Dimensional-Outlines and Bulb J187 H1* sheets at the front of this section.

Cap	Recessed Small Cavity (JEDEC No.J1-21)
Base	Small-Button Neoeightar 7-Pin, Arrangement 1, (JEDEC No.B7-208)
Basing Designation for BOTTOM VIEW	8HR



Pin 1 – Heater
Pin 2 – Grid No.1
Pin 3 – Grid No.2
Pin 4 – Grid No.4
Pin 6 – Grid No.1
Pin 7 – Cathode
Pin 8 – Heater

Cap – Anode (Grid No.3, Grid No.5, Screen, Collector)
C – External Conductive Coating

23DAP4

Maximum and Minimum Ratings, *Design-Maximum Values:*

Unless otherwise specified, voltage values are positive with respect to grid No.1

ANODE VOLTAGE	23000 max.	volts
	10000 min.	volts
GRID-No.4 VOLTAGE:		
Positive value	1100 max.	volts
Negative value	550 max.	volts
GRID-No.2 VOLTAGE	770 max.	volts
	40 min.	volts
CATHODE VOLTAGE:		
Negative peak value	2 max.	volts
Negative bias value	0 max.	volts
Positive bias value	100 max.	volts
Positive peak value	150 max.	volts
HEATER VOLTAGE	6.9 max.	volts
	5.7 min.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode:		
During equipment warm-up period not exceeding 15 seconds	450 max.	volts
After equipment warm-up period	200 max.	volts
Heater positive with respect to cathode:		
Combined AC & DC voltage	200 max.	volts
DC Component	100 max.	volts

Typical Operating Conditions for Cathode-Drive Service:

Unless otherwise specified, voltage values are positive with respect to grid No.1

Anode Voltage	18000	volts
Grid-No.4 Voltage[a]	100	volts
Grid-No.2 Voltage	50	volts
Cathode Voltage for visual extinction of focused raster	35 to 55	volts
Field Strength of required adjustable Centering Magnet	0 to 12	gausses

Maximum Circuit Value:

Grid-No.1 Circuit Resistance	1.5 max.	megohms

For X-radiation shielding considerations, see sheet *X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES* at front of this Section

[a] The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between −100 and +300 volts.