

Picture Tube

BI-PANEL RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS

ALUMINIZED SCREEN
110° MAGNETIC DEFLECTION

With Heater Having Controlled Warm-Up Time

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. 2000 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 and Protective Panel.	Filterglass
Light transmission (Approx.).	40%

Mechanical:

Weight (Approx.).	33 lbs
Overall Length.	15-3/16" ± 3/8"
Neck Length.	5-1/8" ± 1/8"
Projected Area of Screen.	282 sq. in.
External Conductive Coating:	

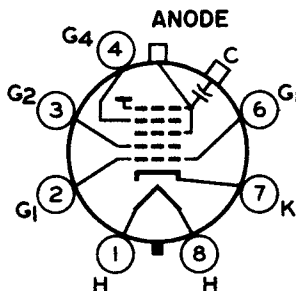
Type.	Regular-Band
Contact area for grounding.	Near Reference Line
For Additional Information on Coatings and Dimensions:	

See *Picture-Tube Dimensional-Outlines and Bulb J187 A* sheets at 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



23CP4A

Maximum and Minimum Ratings, Design-Maximum Values:

Unless otherwise specified, voltage values are positive with respect to cathode

ANODE VOLTAGE	{ 23500 max.	volts
	{ 14000 min.	volts
GRID-No.4 (FOCUSING) VOLTAGE:		
Positive value.	1100 max.	volts
Negative value.	550 max.	volts
GRID-No.2 VOLTAGE	550 max.	volts
GRID-No.1 VOLTAGE:		
Negative peak value	220 max.	volts
Negative bias value	154 max.	volts
Positive bias value	0 max.	volts
Positive peak value	2 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.	300 max.	volts
Heater positive with respect to cathode:		
Combined AC and DC voltage.	200 max.	volts
DC Component.	100 max.	volts

Typical Operating Conditions for Grid-Drive Service:

Unless otherwise specified, voltage values are positive with respect to cathode

Anode Voltage	18000	volts
Grid-No.4 Voltage	0 to 400	volts
Grid-No.2 Voltage	400	volts
Grid-No.1 Voltage for visual extinction		
of focused raster	-44 to -94	volts

Maximum Circuit Value:

Grid-No.1-Circuit Resistance.	1.5 max.	megohms
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For X-radiation shielding considerations, see sheet
X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES
at front of this Section