

Picture Tube

**SHORT RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS**

**ALUMINIZED SCREEN
114° 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. 1700 min.	pf

Heater Current at 6.3 volts 600 $\pm$ 60 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.). 24 lbs

Overall Length. 13-11/16" + 5/16" - 1/4"

Neck Length 4-3/8" $\pm$ 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:

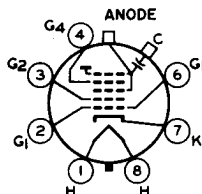
See *Picture-Tube Dimensional-Outlines and Bulb J187 B* sheets at front of this section

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



23FP4A

Maximum and Minimum Ratings, Design-Maximum Values:

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

ANODE VOLTAGE	{ 23500 max. 11000 min.	volts volts
GRID-No.4 (FOCUSING) VOLTAGE:		
Positive value.	1100 max.	volts
Negative value.	550 max.	volts
GRID-No.2 VOLTAGE	{ 550 max. 200 min.	volts volts
GRID-No.1 VOLTAGE:		
Negative peak value	200 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. 5.7 min.	volts 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 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	14000	volts
Grid-No.4 Voltage	0 to 400	volts
Grid-No.2 Voltage	450	volts
Grid-No.1 Voltage for visual extinction of focused raster	-45 to -105	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