

Picture Tube

BI-PANEL RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS
LOW-GRID-NO.2 VOLTAGE

ALUMINIZED SCREEN
110° MAGNETIC DEFLECTION
CATHODE-DRIVE TYPE

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 pf
Heater Current at 6.3 volts	450 ± 25	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.).	32-1/2 lbs
Overall Length.	15-7/16" ± 7/16"
Neck Length.	5-3/8" ± 3/16"
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:

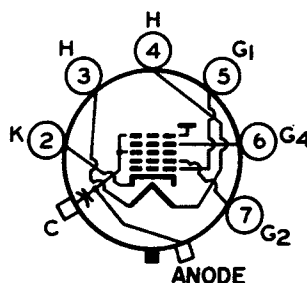
See *Picture-Tube Dimensional-Outlines and Bulb J187 A* sheets
at front of this section

Cap Recessed Small Cavity (JEDEC No.J1-21)

Base. JEDEC No.B6-214

Basing Designation for BOTTOM VIEW. 7FA

Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.4
Pin 7 - Grid No.2



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



23JP4

Maximum and Minimum Ratings, Design-Maximum Values:

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

ANODE VOLTAGE	{ 22000 max. 15000 min.	volts volts
GRID-No.4 (FOCUSING) VOLTAGE:		
Positive value.	1100 max.	volts
Negative value.	550 max.	volts
GRID-No.2 VOLTAGE	{ 70 max. 44 min.	volts 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. 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 Cathode-Drive Service:

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

Anode Voltage	16000	volts
Grid-No.4 Voltage	0 to 500	volts
Grid-No.2 Voltage	50	volts
Cathode Voltage for visual extinction of focused raster.	35 to 50	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

