23GJP4A

Picture Tube

PAN-O-PLY TYPE
110° MAGNETIC DEFLECTION

LOW-VOLTAGE ELECTROSTATIC FOCUS
CATHODE-DRIVE TYPE

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. .	1700 min—2500 max	pF
Heater Current at 6.3 V	450 ± 20	mA
Heater Warm-Up Time (Average)	11	s

Electron Gun. . . . . Type Requiring No Ion-Trap Magnet

OPTICAL

Phosphor. . . . . .P4—Sulfide Type, Aluminized
For curves, see front of this section

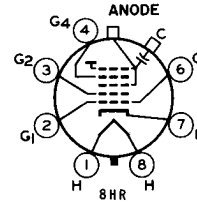
Faceplate . . . . . Filterglass
Light transmission at center (approx.). 42%

MECHANICAL

Weight (Approx.). . . . . 28 lb
Overall Length. . . . . 14.250 ± .281 in
Neck Length . . . . . 4.500 ± .125 in
Projected Area of Screen. . . . . 282 sq in
External Conductive Coating[a]
Type. . . . . .Regular-Band
Contact area for grounding. . . . . Near Reference Line
For Additional Information on Coatings Dimensions
See *Picture-Tube Dimensional-Outlines* and *Bulb J187K* 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)

TERMINAL DIAGRAM (Bottom View)

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



MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

Voltages are positive with respect to grid No.1

Anode Voltage	11000 min—23000 max	V
Grid-No.4 Voltage		
Positive value	1250 max	V
Negative value	400 max	V
Grid-No.2 Voltage	40 min—70 max	V
Cathode Voltage		
Negative peak value	2 max	V
Negative bias value	0 max	V
Positive bias value	100 max	V
Positive peak value	150 max	V
Heater Voltage	5.7 min—6.9 max	V
Peak Heater-Cathode Voltage		
Heater negative with respect to cathode:		
During equipment warm-up period ≤ 15 s	450 max	V
After equipment warm-up period	300 max	V
Heater positive with respect to cathode		
Combined AC & DC voltage	200 max	V
DC component	100 max	V

TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE

Voltages are positive with respect to grid No.1

Anode Voltage	18000	
Grid-No.4 Voltage	0 to 400	V
Grid-No.2 Voltage	50	V
Cathode Voltage	34 to 52	V
For visual extinction of focused raster		

MAXIMUM CIRCUIT VALUE

Grid-No.1 Circuit Resistance	1.5 max	MΩ

[a] Includes implosion protection hardware.

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