

23HGP4

Picture Tube

PAN-O-PLY TYPE WITH MOUNTING LUGS
 110° MAGNETIC DEFLECTION LOW-VOLTAGE ELECTROSTATIC FOCUS

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%		

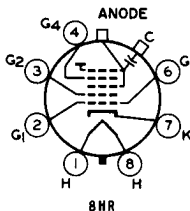
MECHANICAL

Weight (Approx.).	28.5 lb
Overall Length.	14.875 ± .281 in
Neck Length	5.125 ± .125 in
Projected Area of Screen.	282 sq in
External Conductive Coating ^a	

Type (See CRT OUTLINES 1 at front of this section) . .	Regular-Band
Contact area for grounding.	Near Reference Line
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 cathode

Anode Voltage	11000 min—23000 max	V
Grid-No.4 Voltage		
Positive value.	1100 max	V
Negative value.	550 max	V
Grid-No.2 Voltage	200 min—550 max	V
Grid-No.1 Voltage		
Negative peak value	220 max	V
Negative bias value	155 max	V
Positive bias value	0 max	V
Positive peak value	2 max	V
Heater Voltage.	5.7 min—6.9 max	V



23HGP4

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	V
Grid-No.4 Voltage ^b	200	V
Grid-No.2 Voltage	300	V
Cathode Voltage	28 to 62	V
For visual extinction of focused raster		
Field Strength.	0 to 12	G
Of required adjustable centering magnet		

MAXIMUM CIRCUIT VALUE

Grid-No.1 Circuit Resistance.	1.5 max	M Ω
---------------------------------------	---------	------------

^a Includes implosion protection hardware.

^b The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between 0 and +400 volts with the combined grid-No.1 voltage and video-signal voltage adjusted to give an anode current of 200 microamperes on a 13-1/2-inch by 18-inch pattern from an RCA-2F21 monoscope, or equivalent.

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

DIMENSIONAL OUTLINE (Bulb J187 K With Mounting Lugs)

