

Picture Tube

PAN-O-PLY TYPE
NO ION-TRAP MAGNET REQUIRED

LOW-VOLTAGE ELECTROSTATIC FOCUS
110° MAGNETIC DEFLECTION

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	600 ± 30	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%

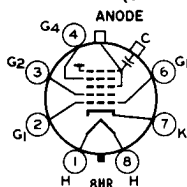
MECHANICAL

Weight (Approx.).	28 lb
Overall Length.	14.875 ± .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 Neoeight 7-Pin, Arrangement 1, (JEDEC No.87-208)

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



23GSP4

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
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- ^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.

DIMENSIONAL OUTLINE

FOR PICTURE TUBE UTILIZING BULB J187K WITH MOUNTING LUGS

