

## Picture Tube

NO ION-TRAP MAGNET REQUIRED  
 LOW-VOLTAGE ELECTROSTATIC FOCUS      110° MAGNETIC DEFLECTION

## 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
		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 (Approx.) . . . . .	76%

## MECHANICAL

Weight (Approx.) . . . . .	25 lb
Overall Length . . . . .	14.875 ± 0.281 in
Neck Length. . . . .	5.125 ± 0.125 in
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

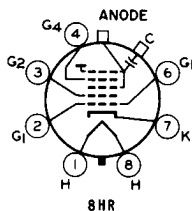
See *Picture-Tube Dimensional-Outlines* and *Bulb J187 E* sheets  
 at front of this section

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



# 23ARP4

## MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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

Anode Voltage. . . . .	{ 22000 max 12000 min	V V
<b>Grid-No. 4 (Focusing) Voltage</b>		
Positive value . . . . .	1100 max	V
Negative value . . . . .	550 max	V
<b>Grid-No. 2 Voltage. . . . .</b>	{ 550 max 200 min	V V
<b>Grid-No. 1 Voltage</b>		
Negative peak value. . . . .	220 max	V
Negative bias value. . . . .	155 max	V
Positive bias value. . . . .	0 max	V
Positive peak value. . . . .	2 max	V
<b>Heater Voltage . . . . .</b>	{ 6.9 max 5.7 min	V V
<b>Peak Heater-Cathode Voltage</b>		
Heater negative with respect to cathode:		
During equipment warm-up period not exceeding 15 seconds. . . . .	450 max	V
After equipment warm-up period . . . . .	200 max	V
Heater positive with respect to cathode:		
Combined AC and DC voltage . . . . .	200 max	V
DC component . . . . .	100 max	V

## TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE

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

Anode Voltage. . . . .	16000	V
Grid-No. 4 Voltage. . . . .	0 to 400	V
Grid-No. 2 Voltage. . . . .	400	V
Cathode Voltage. . . . .	43 to 78	V

For visual extinction of focused raster

## MAXIMUM CIRCUIT VALUE

Grid-No. 1 Circuit Resistance . . . . .	1.5 max	MΩ
---	---------	----

