

# 19CXP4

## Picture Tube

NO ION-TRAP MAGNET REQUIRED

LOW-VOLTAGE ELECTROSTATIC FOCUS 114° MAGNETIC DEFLECTION

*Low-Grid-No.2 Voltage — for Cathode-Drive Operation*

### 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. . . . .	{ 1900 max	pF
	{ 1400 min	pF
Heater Current at 6.3 V . . . . .	600 ± 60	mA
Heater Warm-Up Time (Average) . . . . .	11	s
Electron Gun. . . . .	Type Requiring No Ion-Trap Magnet	

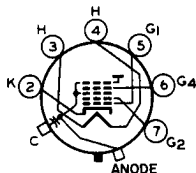
### OPTICAL

Phosphor. . . . .	.P4—Sulfide Type, Aluminized	
For curves, see front of this section		
Faceplate . . . . .	Filterglass	
Light transmission (Approx.). . . . .	78%	

### MECHANICAL

Weight (Approx.). . . . .	14 lb	
Overall Length. . . . .	11.625 ± 0.250 in	
Neck Length . . . . .	4.375 ± 0.125 in	
Projected Area of Screen. . . . .	172 sq in	
External Conductive Coating		
Type. . . . .	Regular-Band	
Contact area for grounding. . . . .	Near Reference Line	
For Addition Information on Coatings and Dimensions		
See <i>Picture-Tube Dimensional-Outlines</i> and <i>Bulb J149A</i> sheets at front of this section		
Cap . . . . .	Recessed Small Cavity (JEDEC No. J1-21)	
Base. . . . .	Special 6-Pin (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



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## MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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

Anode Voltage . . . . .	{ 20000 max 12000 min	V V
<b>Grid-No.4 (Focusing) Voltage</b>		
Positive value . . . . .	1100 max	V
Negative value . . . . .	500 max	V
<b>Grid-No.2 Voltage . . . . .</b>	{ 55 max 30 min	V V
<b>Cathode Voltage</b>		
Negative peak value . . . . .	2 max	V
Negative bias value . . . . .	0 max	V
Positive bias value . . . . .	100 max	V
Positive peak value . . . . .	150 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 500	V
Grid-No.2 Voltage . . . . .	45	V
Cathode Voltage . . . . .	35 to 50	V

For visual extinction of focused raster

## MAXIMUM CIRCUIT VALUE

Grid-No.1 Circuit Resistance . . . . .	1.5 max	MΩ
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For X-radiation shielding considerations, see sheet  
*X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES* at  
front of this section

