

## Picture Tube

RECTANGULAR GLASS TYPE  
LOW-VOLTAGE ELECTROSTATIC FOCUS

ALUMINIZED SCREEN  
92° MAGNETIC DEFLECTION

### GENERAL DATA

#### Electrical:

Heater Current at 6.3 volts . . . . .	600 ± 5%	ma
Direct Interelectrode Capacitances:		
Grid No.1 to all other electrodes . . . . .	6	μμf
Cathode to all other electrodes . . . . .	5	μμf
External conductive coating to ultor. . . . .	2000 max. 1500 min.	μμf
Electron Gun. . . . .		

#### Optical:

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

#### Mechanical:

Operating Position. . . . .	Any
Weight (Approx.). . . . .	14-3/4 lbs
Overall Length. . . . .	15-1/4" ± 3/8"
Neck Length . . . . .	5-1/2" ± 3/16"
Projected Area of Screen. . . . .	172 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 J149 B* sheets at the front of this section

Cap . . . . . Recessed Small Cavity (JEDEC No. J1-21)

Bases (Alternates):

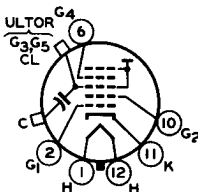
Short Small-Shell Duodecal 6-Pin (JEDEC Group 4, No. B6-203)

Small-Shell Duodecal 6-Pin, Arrangement 1

(JEDEC Group 4, No. B6-63)

Basing Designation for BOTTOM VIEW. . . . . 12L

- Pin 1 - Heater
- Pin 2 - Grid No.1
- Pin 6 - Grid No.4
- Pin 10 - Grid No.2
- Pin 11 - Cathode
- Pin 12 - Heater



- Cap - Ultor  
(Grid No.3,  
Grid No.5,  
Collector)
- C - External  
Conductive  
Coating



# 19BFP4

## Maximum Ratings, Design-Maximum Values:

ULTOR VOLTAGE . . . . .	20000 max.	volts
GRID-No.4 (FOCUSING) VOLTAGE:		
Positive value. . . . .	1100 max.	volts
Negative value. . . . .	550 max.	volts
GRID-No.2 VOLTAGE . . . . .	550 max.	volts
GRID-No.1 VOLTAGE:		
Negative bias value . . . . .	154 max.	volts
Positive bias value . . . . .	0 max.	volts
Positive peak value . . . . .	2 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode:		
During equipment warm-up period not exceeding 15 seconds. . . . .	450 max.	volts
After equipment warm-up period. . . . .	200 max.	volts
Heater positive with respect to cathode. . . . .	200 max.	volts

## Typical Operating Conditions:

With ultor voltage of	16000	volts
and grid-No.2 voltage of	400	volts.
Grid-No.4 Voltage for focus . . . . .	0 to 400	volts
Grid-No.1 Voltage for visual extinction of focused raster. . . . .	-36 to -94	volts

## Maximum Circuit Values:

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

