

Picture Tube

RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS
LOW-GRID-No.2 VOLTAGE

ALUMINIZED SCREEN
92° MAGNETIC DEFLECTION
CATHODE-DRIVE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Current at 6.3 volts	600 ± 10%	ma
Heater Warm-Up Time (Average)	11	seconds
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.	μμf
	1500 min.	μμf
Electron Gun.	Type Requiring No Ion-Trap Magnet	

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.)	15 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):

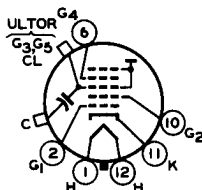
Short Small-Shell Duodecal 6-Pin (JEDEC Group 4, No.B6-203)

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



19BDP4

Maximum and Minimum Ratings, Design-Maximum Values:

ULTOR-TO-GRID-No.1 VOLTAGE.	{ 19800 max. 12000 min.	volts volts
GRID-No.4-TO-GRID-No.1 (FOCUSING) VOLTAGE:		
Positive value.	1100 max.	volts
Negative value.	500 max.	volts
GRID-No.2-TO-GRID-No.1 VOLTAGE.	{ 70 max. 40 min.	volts volts
CATHODE-TO-GRID-No.1 VOLTAGE.	100 max.	volts
HEATER VOLTAGE.	{ 7 max. 5.8 min.	volts volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode:		
During equipment warm-up period not exceeding 15 seconds.	410 max.	volts
After equipment warm-up period. . . .	180 max.	volts
Heater positive with respect to cathode.	180 max.	volts

Typical Operating Conditions:

With ultor-to-grid-No.1 voltage of	14500	volts
and grid-No.2-to-grid-No.1 voltage of	50	volts
Grid-No.4-to-Grid-No.1 Voltage for focus .	0 to 500	volts
Cathode-to-Grid-No.1 Voltage for visual extinction of focused raster. . .	31 to 49	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

