

Picture Tube

BI-PANEL RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS

ALUMINIZED SCREEN
92° MAGNETIC DEFLECTION

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Current at 6.3 volts	600 ± 5%	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. .	{ 2500 max. 2000 min.	{ μμf μμf
Electron Gun.	Type Requiring No Ion-Trap Magnet	

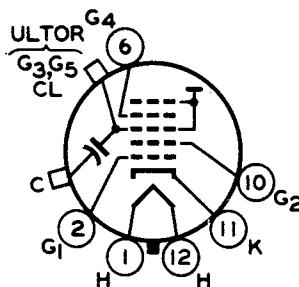
Optical:

Faceplate and Protective Panel.	Filterglass
Light transmission (Approx.)	40%
Phosphor (For curves, see front of this section) .	P4—Sulfide Type, Aluminized

Mechanical:

Operating Position.	Any
Weight (Approx.)	34-1/2 lbs
Overall Length.	18-5/16" ± 7/16"
Neck Length	5-1/2" ± 3/16"
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 <i>Picture-Tube Dimensional-Outlines</i> and <i>Bulb J187 D/G</i> sheets at the front of this section	
Cap	Recessed Small Cavity (JEDEC No. J1-21)
Base.	Short Small-Shell Duodecal 6-Pin (JEDEC Group 4, No. B6-203)
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



23YP4

Maximum and Minimum Ratings, Design-Maximum Values:

ULTOR VOLTAGE	{ 22000 max. 12000 min.	volts 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 peak value	220 max.	volts
Negative bias value	155 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	300	volts
Grid-No.4 Voltage for focus	0 to 400	volts
Grid-No.1 Voltage for visual extinction		
of focused raster	-35 to -72	volts

Maximum Circuit Values:

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

For X-radiation shielding considerations, see sheet
X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES
at front of this section