

Oscillograph Tube

ELECTROSTATIC FOCUS

ELECTROSTATIC DEFLECTION

DATA

General:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3	volts
Current	0.6 $\pm$ 10%	amp

Direct Interelectrode Capacitances (Approx.):

Grid No.1 to all other electrodes	7.5	$\mu\mu\text{f}$
Cathode to all other electrodes	4.3	$\mu\mu\text{f}$
Deflecting electrode DJ ₁ to deflecting electrode DJ ₂	5.2	$\mu\mu\text{f}$
Deflecting electrode DJ ₃ to deflecting electrode DJ ₄	7	$\mu\mu\text{f}$
DJ ₁ to all other electrodes	10.1	$\mu\mu\text{f}$
DJ ₂ to all other electrodes	7.5	$\mu\mu\text{f}$
DJ ₃ to all other electrodes	8.1	$\mu\mu\text{f}$
DJ ₄ to all other electrodes	9.2	$\mu\mu\text{f}$

Faceplate, Spherical. Clear Glass

Phosphor (For Curves, see front of this Section). P1

Fluorescence. Yellowish-Green

Phosphorescence Yellowish-Green

Persistence Medium

Focusing Method Electrostatic

Deflection Method Electrostatic

Overall Length. 9-1/8" $\pm$ 1/4"

Greatest Diameter of Bulb 3" $\pm$ 1/16"

Minimum Useful Screen Diameter. 2-3/4"

Useful Scan (Centered with

respect to tube face):

By deflecting electrodes DJ ₁ & DJ ₂	2-3/4"
By deflecting electrodes DJ ₃ & DJ ₄	2-1/4"

Operating Position. Any

Bulb. J24P1

Base. Small-Shell Duodecal 12-Pin (JEDEC Group 4, No.B12-43)

Basing Designation for BOTTOM VIEW. 12E

Pin 1 - Heater

Pin 2 - Grid No.1

Pin 3 - Cathode

Pin 4 - Grid No.3

Pin 5 - Internal Connection—
Do Not Use

Pin 6 - Deflecting Electrode
DJ₃

Pin 7 - Deflecting Electrode
DJ₄

Pin 8 - Ultor

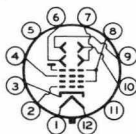
(Grid No.2,
Grid No.4,
Collector)

Pin 9 - Deflecting Electrode
DJ₂

Pin 10 - Deflecting Electrode
DJ₁

Pin 11 - Internal Connection—
Do Not Use

Pin 12 - Heater



DJ₁ and DJ₂ are nearer the screen

DJ₃ and DJ₄ are nearer the base



3AQPI

Maximum and Minimum Ratings, Design-Center Values:

ULTOR VOLTAGE.	{ 2750 max.	volts
	500 min.	volts
ULTOR INPUT (AVERAGE).	6 max.	watts
GRID-No.3 VOLTAGE.	1100 max.	volts
GRID-No.1 VOLTAGE:		
Negative-bias value.	200 max.	volts
Positive-bias value.	0 max.	volts
Positive-peak value.	2 max.	volts
PEAK VOLTAGE BETWEEN ULTOR AND ANY DEFLECTING ELECTRODE	550 max.	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	125 max.	volts
Heater positive with respect to cathode.	125 max.	volts

Equipment Design Ranges:

For any ultor voltage (E_{c4}) between 500 and 2750 volts

Grid-No.3 Voltage		
for focus.	16.5% to 31% of E_{c4}	volts
Negative Grid-No.1		
Voltage for visual		
extinction of		
undeflected spot	2.8% to 6.7% of E_{c4}	volts
Grid-No.3 Current		
for any operating		
condition.	-15 to +10	μa
Deflection Factors:		
DJ ₁ & DJ ₂	73 to 99	v dc/in./kv of E_{c4}
DJ ₃ & DJ ₄	26 to 35	v dc/in./kv of E_{c4}

