

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 μf

Cathode to all other electrodes 4.3 μf

Deflecting electrode DJ_1 to deflecting electrode DJ_2 5.2 μf

Deflecting electrode DJ_3 to deflecting electrode DJ_4 7 μf

DJ_1 to all other electrodes 10.1 μf

DJ_2 to all other electrodes 7.5 μf

DJ_3 to all other electrodes 8.1 μf

DJ_4 to all other electrodes 9.2 μf

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. $9\frac{1}{8}'' \pm \frac{1}{4}''$

Greatest Diameter of Bulb $3'' \pm \frac{1}{16}''$

Minimum Useful Screen Diameter. $2\frac{3}{4}''$

Useful Scan (Centered with

respect to tube face):

By deflecting electrodes DJ_1 & DJ_2 $2\frac{3}{4}''$

By deflecting electrodes DJ_3 & DJ_4 $2\frac{1}{4}''$

Operating Position. Any

Bulb. J24P1

Base. Small-Shell Duodecal 12-Pin (JEDEC Group 4, No.812-43)

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
 DJ_3

Pin 7 - Deflecting
Electrode
 DJ_4

Pin 8 - Ultor

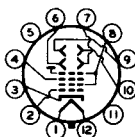
(Grid No.2,
Grid No.4,
Collector)

Pin 9 - Deflecting
Electrode
 DJ_2

Pin 10 - Deflecting
Electrode
 DJ_1

Pin 11 - Internal Connection—
Do Not Use

Pin 12 - Heater



DJ_1 and DJ_2 are nearer the screen
 DJ_3 and DJ_4 are nearer the base



3AQP1

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}

