

Oscillograph-Type Cathode-Ray Tube

ELECTROSTATIC DEFLECTION 5-in DIAMETER ELECTROSTATIC FOCUS

*For General Oscillographic Applications in which
Recurrent-Wave Phenomena are to be Observed*

ELECTRICAL

Heater Current at 6.3 V	0.6	A
Direct Interelectrode Capacitances (Approx.)		
Grid-No.1 to all other electrodes	10	pF
Cathode to all other electrodes	5.5	pF
DJ1 to DJ2.	2.5	pF
DJ3 to DJ4.	3.0	pF
DJ1 to all other electrodes	10.5	pF
DJ2 to all other electrodes	8.5	pF
DJ3 to all other electrodes	8.5	pF
DJ4 to all other electrodes	9.5	pF
Focusing Method	Electrostatic	
Deflection Method	Electrostatic	

OPTICAL

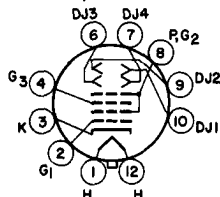
Phosphor.	P1
Fluorescence and phosphorescence.	Yellowish-Green
Persistence	Medium
Faceplate	Clear Glass
Shape	Flat, Circular
Minimum Useful Screen Diameter.	4.56 in

MECHANICAL

Operating Position.	Any
Weight.	2 lb
Overall Length.	12.000 $\pm$ 0.125 in
Greatest Diameter	5.25 $\pm$ 0.06 in
Bulb.	J42 Dev.66
Base.	Special, Small-Shell Duodecal, 10-pin

TERMINAL DIAGRAM (Bottom View)

- Pin 1-Heater
- Pin 2-Grid No.1
- Pin 3-Cathode
- Pin 4-Grid No.3
- Pin 6-Deflecting Electrode DJ3
- Pin 7-Deflecting Electrode DJ4
- Pin 8-Anode, Grid No.2
- Pin 9-Deflecting Electrode DJ2
- Pin 10-Deflecting Electrode DJ1
- Pin 12-Heater



ABSOLUTE-MAXIMUM AND MINIMUM RATINGS

Anode Voltage	2800 max	V
Grid-No.3 (Focusing-Electrode) Voltage.	1100 max	V
Grid-No.1 Voltage		
Negative bias value	200 max	V
Positive bias value	0 max	V
Positive peak value	2 max	V



Heater Voltage.	{ 6.9 max V	V
	{ 5.7 min V	V
Peak Heater-Cathode Voltage		
Heater negative with respect to cathode	125 max	V
Heater positive with respect to cathode	125 max	V

TYPICAL OPERATING VALUES

Unless otherwise specified all values are positive with respect to cathode

Anode Voltage	2200	V
Grid-No.3 (Focusing-Electrode) Voltage. . . .	750 to 1000	V
Grid-No.1 Voltage	-60 to -140	V

For visual cutoff of focused spot

Deflection Factors

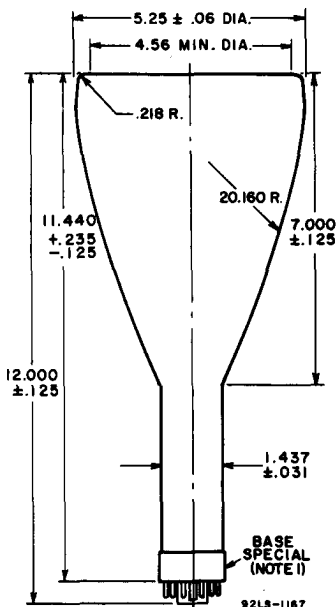
DJ1 and DJ2	84 to 106	V (dc)/in
DJ3 and DJ4	67 to 83	V (dc)/in

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance.	1.5 max	MΩ
Resistance in any Deflection Electrode Circuit ^a .	5 max	MΩ

^a It is recommended that the deflecting-electrode-circuit resistances be approximately equal.

DIMENSIONAL OUTLINE



The plane through the tube axis and pin 4 may vary from the trace produced by DJ1 and DJ2 by an angular tolerance (measured about the tube axis) of 10°. Angle between DJ1 - DJ2 trace and DJ3 - DJ4 trace is 90° ± 3°.

DJ1 and DJ2 are nearer the screen; DJ3 and DJ4 are nearer the base. With DJ1 positive with respect to DJ2, the spot will be deflected toward pin 4; likewise, with DJ3 positive with respect to DJ4, the spot will be deflected toward Pin 1.

Note 1: Base is identical to short small-shell duodecal JEDEC No. B12-207 except pin No. 5 and pin No. 11 are omitted.

DIMENSIONS IN INCHES