

Oscillograph-Type Cathode-Ray Tube

5-Inch Diameter
Electrostatic Deflection

Post-Deflection Accelerator
Electrostatic Focus

For General Oscillographic Applications in which Extremely Low-Speed or Medium-Speed Recurrent- or Non-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	9.0	pF
Focusing Method	Electrostatic	
Deflection Method	Electrostatic	

OPTICAL

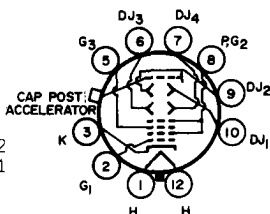
Phosphor.	P7
Fluorescence.	Purplish-Blue
Phosphorescence	Yellowish-Green
Persistence	Long
Faceplate	Clear Glass
Shape	Flat, Circular
Minimum Useful Screen Diameter.	4.56 in

MECHANICAL

Operating Position.	Any
Weight (Approx.).	2 lb
Overall Length.	12.00 ± 0.13 in
Greatest Diameter	5.31 in
Bulb.	J42 Dev.67
Base.	Special, Small-Shell Duodecal, 10-Pin

TERMINAL DIAGRAM (Bottom View)

- Pin 1-Heater
- Pin 2-Grid No.1
- Pin 3-Cathode
- Pin 5-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
- Cap - Post-Accelerator
(Grid No.5 & collector)



ABSOLUTE-MAXIMUM AND MINIMUM RATINGS

Post-Deflection Accelerator Voltage	6000 max	V
Anode Voltage	3000 max	V
Grid-No.3 (Focusing-Electrode) Voltage.	1200 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 5.7 min	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*

Post-Deflection Accelerator Voltage . .	3000	V
Anode Voltage	1500	V
Grid-No.3 (Focusing-Electrode) Voltage. 475 to 725		V
Grid-No.1 Voltage	-40 to -94	V
For visual cutoff of focused spot		
Deflection Factors		
DJ1 and DJ2	69 to 91	V (dc)/in
DJ3 and DJ4	57 to 73	V (dc)/in

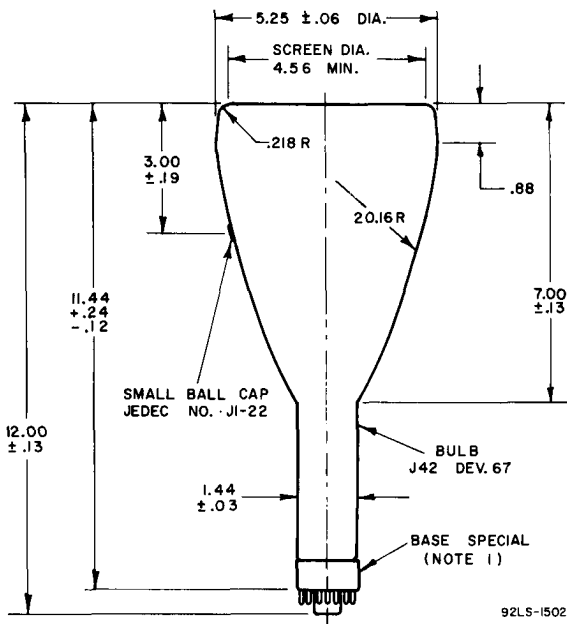
MAXIMUM CIRCUIT VALUES

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.

X-RADIATION WARNING: Shielding of these cathode-ray tubes for x-radiation may be needed to protect against possible danger of personal injury from prolonged exposure at close range.

DIMENSIONAL OUTLINE



DIMENSIONS IN INCHES

The plane through the tube axis and pin 1 may vary from the trace produced by DJ3 and DJ4 by an angular tolerance (measured about the tube axis) of 10° . Angle between DJ1 - DJ2 trace and DJ3 - DJ4 trace is $90^\circ \pm 3^\circ$.

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 5; 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. 4 and pin No. 11 are omitted.