

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (Approx.)	
Horizontal	65 Degrees
Vertical	50 Degrees
Diagonal	70 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (Approx.)	76 Percent

ELECTRICAL DATA

Heater Voltage	6.3 Volts	
Heater Current	$0.6 \pm 10\%$ Ampere	
Direct Interelectrode Capacitances (Approx.)		
Cathode to All Other Electrodes	5 μmf	
Grid No. 1 to All Other Electrodes	6.5 μmf	
External Conductive Coating to Anode ¹	2000 μmf	Max.
	750 μmf	Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions	$11\frac{1}{2} \times 8\frac{5}{8}$ Inches
Minimum Useful Screen Area	96 Sq. Inches
Overall Length	$16\frac{3}{4}$ Inches
Neck Length	$7\frac{1}{2}$ Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Bulb	J109 $\frac{1}{2}$ A1 or J109 $\frac{1}{2}$ C1
Base (Small Shell Duodecal 6-Pin)	B6-63
Basing	12L
Weight (Approx.)	11 Pounds

RATINGS

MAXIMUM RATINGS (Design Maximum Values)

Anode Voltage	22,000 Volts	dc
Grid No. 4 Voltage (Focusing Electrode)	800 Volts	dc
Grid No. 2 Voltage	700 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	180 Volts	dc
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
During Warm-up Period not to Exceed 15 Seconds	450 Volts	
After Equipment Warm-up Period	200 Volts	
Heater Positive with Respect to Cathode	200 Volts	

TYPICAL OPERATING CONDITIONS

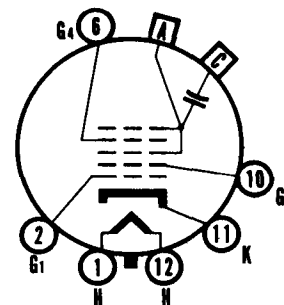
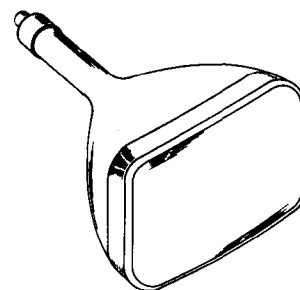
Anode Voltage	18,000 Volts	dc
Grid No 4 Voltage for Focus	0 to +400 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ²	-35 to -72 Volts	dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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QUICK REFERENCE DATA

Television Monitor Tube
14" Direct Viewed
Rectangular Glass Type
Spherical Faceplate
Magnetic Deflection
Electrostatic Focus
No Ion Trap
External Conductive Coating
Aluminized Screen
High Resolution



12-1

SYLVANIA ELECTRONIC TUBES

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File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

1. External conductive coating must be grounded.
2. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

Technical drawing of a 6-PIN SMALL SHELL DUODECAL BASE (B6-63). The drawing includes three views: a front view, a side view, and a bottom view.

Front View Dimensions:

- Top left corner: $13\frac{1}{16} \pm \frac{1}{8}$
- Top right corner: $12\frac{3}{4}$
- Top edge: $2\frac{47}{64}$ R.
- Right edge: $2\frac{11}{64}$ R.
- Right side: $8\frac{21}{32}$ MIN.
- Bottom edge: $11\frac{9}{16}$ MIN.
- Bottom edge: $12\frac{1}{2} \pm \frac{1}{8}$

Side View Dimensions:

- Top edge: $8\frac{1}{8}$ R.
- Left edge: $9\frac{11}{16}$
- Left edge: $\pm \frac{1}{8}$
- Right edge: $16\frac{3}{4} \pm \frac{3}{8}$
- Internal feature: 27 R.
- Internal feature: 27 R.
- Internal feature: $17\frac{3}{8}$ R.
- Internal feature: 65°
- Internal feature: $2\frac{1}{2} \pm \frac{1}{4}$
- Internal feature: $2\frac{1}{8} \pm \frac{1}{8}$ R.
- Internal feature: $2\frac{5}{8} \pm \frac{3}{8}$
- Internal feature: $7\frac{1}{2} \pm \frac{3}{16}$

Bottom View Dimensions:

- Top edge: $2\frac{1}{4} \pm \frac{1}{4}$
- Top edge: 27 R.
- Top edge: $17\frac{3}{8}$ R.
- Top edge: 65°
- Top edge: $2\frac{1}{8} \pm \frac{1}{8}$ R.
- Top edge: $2\frac{5}{8} \pm \frac{3}{8}$
- Top edge: $7\frac{1}{2} \pm \frac{3}{16}$
- Top edge: $1\frac{7}{16} \pm \frac{1}{16}$ DIA.

Labels and Notes:

- USEFUL SCREEN AREA
- ANODE RECESSED SMALL CAVITY CAP J1-21
- REF. LINE
- EXTERNAL CONDUCTIVE COATING
- REFERENCE LINE (NOTE 1)
- CENTER LINE A-A'
- PIN 6 (NOTE 2)
- 6-PIN SMALL SHELL DUODECAL BASE B6-63
- D60009

1. *With the tube neck inserted through the flared end of Reference-Line Gauge (JEDEC No. 110) and with the tube seated in the gauge, the reference line is determined by the intersection of the plane C-C' (face of the flared end) of the gauge with the glass funnel.*
2. *The plane through the tube axis and the base pin No. 6 may vary from the plane through the tube axis and the bulb terminal by an angular tolerance of $\pm 30^\circ$ measured about the tube axis. The bulb terminal is on the same side of the tube as pin No. 6.*