

17CFP4



engineering data service

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (approx.)	U U
Horizontal	
Diagonal	
Phosphor	Aluminized P4
Fluorescence	White
Persistence	
Faceplate	Gray Filter Glass
Light Transmittance (approx.) .	\ldots \ldots \ldots $.$ $.$ 77 \pm 3 Percent

ELECTRICAL DATA

Heater Voltage				6.3 Volts	
Heater Current			0.6 ±	5% Ampere	
Heater Warm-up Time ¹				11 Seconds	
Direct Interelectrode Capacitances (approx	:.)				
Cathode to All Other Electrodes .				5 µµf	
Grid No. 1 to All Other Electrodes .					
External Conductive Coating to Anod	e^2		. 1	.500 μμf	Max.
U					Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions	
(Maximum Assured)	$14\frac{3}{4} \times 11^{11}_{16}$ Inches
Minimum Useful Screen Area	155 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base	-
Basing	12L
Weight (approx.)	10 ¹ ⁄2 Pounds

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage											17,600 Volts	dc
Grid No. 4 Voltage												
(Focusing Electrode)								-4	550	to	+1100 Volts	dc
Grid No. 2 Voltage											550 Volts	dc
Grid No. 1 Voltage												
Negative Bias Value .											155 Volts	dc
Negative Peak Value											220 Volts	
Positive Bias Value .											0 Volts	dc
Positive Peak Value .											2 Volts	
Peak Heater-Cathode Voltag	ge											
Heater Negative with R		pec	t to	o C	ath	ode	2					
During Warm-up Peri												
15 Seconds											450 Volts	
After Equipment War	m-	up	Per	rio	f						200 Volts	
Heater Positive with Re	esp	ect	to	Ca	the	ode					200 Volts	

TYPICAL OPERATING CONDITIONS

Anode Voltage		14,000 Volts	dc
Grid No. 4 Voltage for Focus		-50 to +350 Volts	dc
Grid No. 2 Voltage		300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ³		–35 to –72 Volts	dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms Max.

QUICK REFERENCE DATA

Television Picture Tube 17" Direct Viewed Rectangular Glass Type Lightweight Tube Spherical Faceplate Gray Filter Glass Aluminized Screen Electrostatic Focus 90° Magnetic Deflection Short Neck Tube No Ion Trap External Conductive Coating





12-L

SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE DIVISION

SENECA FALLS, NEW YORK

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

> JULY, 1957 PAGE 1 OF 3

SYLVANIA

17CFP4

PAGE 2

NOTES:

- 1. Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with E = 25 volts and series R = 31.5 ohms.
- 2. External conductive coating must be grounded.
- 3. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

SYLVANIA

17CFP4

PAGE 3



DIAGRAM NOTES:

- 1. Reference line is determined by the plane C-C¹ of the reference line gauge (JETEC No. 116) when the gauge is resting on the glass cone.
- 2. Contact area for external conductive coating, 2" x 2", located 90° counter-clockwise from anode contact as viewed from base end of tube.
- 3. Anode contact aligns with pin position No. 6 \pm 30 degrees.