

engineering data service

SYLVANIA 3JP1 3JP7 3JP12

CHARACTERISTICS									
GENERAL DATA									
Focusing Method Electrostatic Deflecting Method Electrostatic Phosphor Pl Fluorescence Green Persistence Medium Faceplate Clear									
ELECTRICAL DATA									
Heater Voltage6.3 VoltsHeater Current (approx.) $0.6 \pm 10\%$ AmpereDirect Interelectrode Capacitances (approx.) $8 \mu \mu f$ Cathode to All Other Electrodes $8 \mu \mu f$ Grid No. 1 to All Other Electrodes $8 \mu \mu f$ Between Deflecting Plates $1-2^1$ $2.5 \mu \mu f$ Between Deflecting Plates $3-4^1$ $2 \mu \mu f$ Deflecting Plate 1^1 to All Other Electrodes $8 \mu \mu f$ Deflecting Plate 2^1 to All Other Electrodes $7 \mu \mu f$ Deflecting Plate 3^1 to All Other Electrodes $7 \mu \mu f$ Deflecting Plate 4^1 to All Other Electrodes $8 \mu \mu f$									
MECHANICAL DATA									
Minimum Useful Screen Diameter23/4 InchesBulb Contact (Recessed Small Ball Cap)J1-22Base (Medium Shell Diheptal 12-Pin)B12-37Basing14J									
RATINGS									
MAXIMUM RATINGS (Absolute Maximum Values)									
A = 1. M. 2 W 1.									

Anode No. 3 Voltage .	٠.									4,400 Volts dc
Anode No. 2 Voltage .										2,200 Volts dc
Anode No. 1 Voltage .										1,100 Volts dc
Grid No. 1 Voltage										,
Negative Bias Value										220 Volts dc
Positive Bias Value										0 Volts dc
Positive Peak Value										2 Volts
Peak Heater-Cathode Vo	lta	ge								
Heater Negative wit	hΪ	(es	eci	t to	Ca	ith	ode	:		140 Volts
Heater Positive with	R	esp	ect	to	Cai	ho	de			140 Volts
Peak Voltage Between A	noc	le l	Vо.	2						
And Any Deflecting	Pla	te								550 Volts

TYPICAL OPERATING CONDITIONS

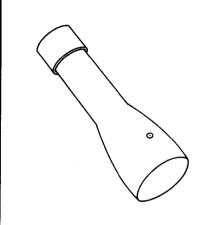
Anode No. 3 Voltage ²							3,000 Volts dc
Anode No. 2 Voltages							1,500 Volts dc
Anode No. 1 Voltage							300 to 515 Volts dc
Grid No. 1 Voltage Requir	ed f	or (Cui	toff	4		-22.5 to 67.5 Volts dc
Deflection Factor ^{5, 6}							
Deflecting Plates 1-27							127-173 Volts dc/Inch
Deflecting Plates 3-48	•						94-128 Volts dc/Inch

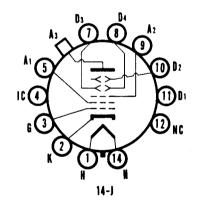
CIRCUIT VALUES

Grid No. 1 Circuit Resistance					1.5 Megohms Max.
Deflection Circuit Resistance					5.0 Megohms Max.

QUICK REFERENCE DATA

Special Purpose Tube 3" Direct Viewed Round Glass Type Electrostatic Deflection Electrostatic Focus Post Deflection Accelerator





SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE DIVISION

SENECA FALLS, NEW YORK

Prepared and Released By Tibe TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

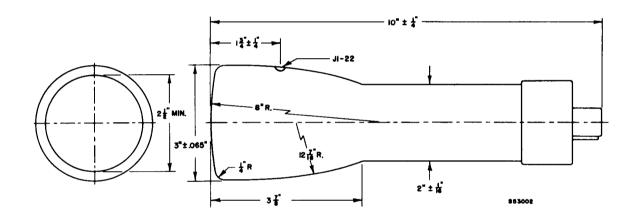
> JULY, 1957 PAGE 1 OF 2

SYLVANIA 3JP1 3JP7 3JP12

PAGE 2

NOTES:

- 1. Positive voltage on Pin No. 1 will deflect spot approximately toward Pin No. 5. Positive voltage on Pin No. 7 will deflect spot approximately toward Pin No. 2.
- 2. Anode No. 3 voltage should not be less than 3,000 volts for high speed scanning.
- 3. Recommended minimum value of Anode No. 2 Voltage.
- 4. Visual extinction of undeflected focused spot.
- 5. The plane through the tube axis and each of the following items may vary from the trace produced by Deflecting Plates 1-2 by the following angular tolerances measured about the tube axis; Pin 5 10 degrees; cap (on same side of tube as Pin 5) 10 degrees.
- 6. Angle between D1-D2 trace and D3-D4 trace is 90° ± 3°.
- 7. Deflecting Plates 1-2 are nearer the screen.
- 8. Deflecting Plates 3-4 are nearer the base.



3JP7

The Type 3JP7 is identical to the Type 3JP1 except it has a phosphor of blue-white fluorescence, yellow phosphorescence, and long persistence.

3JP12

The Type 3JP12 is identical to the Type 3JP1 except it has an orange phosphor of Medium Long persistence.