

SYLVANIA ELECTRIC

RMA Registration Data

TYPE 12VP4

CATHODE-RAY TUBE

from RMA release #788

Oct. 10, 1949

The Type 12VP4 is a twelve inch magnetic-focus and magnetic-deflection direct-view picture tube for television applications. This type has an external conductive coating, and it has an electron gun of triode construction to be used with an external ion-trap magnet.

GENERAL DATA

ELECTRICAL

Heater Voltage	6.3 volts
Heater Current	0.6 $\pm$ 10% amps
Focusing Method	magnetic
Deflecting Method	magnetic
Deflecting Angle (approx.)	55 degrees
Phosphor	#4
Fluorescence	white
Persistence	medium
Capacitance	
External Conductive Coating to Anode	
Maximum	3,000 $\mu\mu\text{f}$
Minimum	750 $\mu\mu\text{f}$

MECHANICAL

Overall Length	18 $\pm$ 3/8 inches
Greatest Diameter of Bulb	12 7/16 $\begin{matrix} + 1/16 \\ - 1/8 \end{matrix}$ inches
Minimum Useful Screen Diameter	11 inches
Bulb Contact	J1-21, Recessed Small Cavity Cap
Base	B5-57, Small Shell Duodecal 5-Pin
Basing	12G
Bulb Contact Alignment	
with Pin Position #3 (vacant)	$\pm$ 10 degrees

MAXIMUM RATINGS-- Design Center Values

Anode Voltage (dc)	12,000 volts
Grid Voltage	
Negative-Bias (dc)	125 volts
Positive-Bias (dc)	0 volts
Positive Peak	2 volts
Peak Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
During Warm-Up Period (1)	410 volts
After Warm-Up Period	125 volts
Heater Positive with Respect to Cathode...	125 volts

(1) Not to exceed 15 seconds.

TYPE 12VP4

TYPICAL OPERATING CONDITIONS

Anode Voltage (dc) 11,000 volts
 Grid Voltage for Cut-Off (dc) -33 to -77 volts

MAXIMUM CIRCUIT VALUES

Grid #1 Circuit Resistance 1.5 megohms

