



ELECTRONIC TUBE REFERENCE

25BP22

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Twenty-five-inch color television picture tube with three electrostatically focused guns, magnetic convergence/deflection, and an aluminized P22 tricolor screen. High-voltage direct-view construction and shadow-mask color presentation place it firmly in color receiver service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	27500 V
<i>Published source ratings and characteristics promoted where applicable; additional electrical and operating data retained as parameters.</i>	

25-inch color television CRT electrically identical to 25AP22 except for removal of the integral protective window.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1964 RMA EIA

Section 1 · Cathode Ray

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Cathode-ray display / television / instrumentation	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Magnetic	—
Deflection angle	90 deg	—
Light transmission	69 %	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gun count	3	—
Screen	P22 aluminized tricolor phosphor-dot shadow-mask	—
Difference from 25AP22	No integral protective window	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage minimum	20000 V	—
Anode voltage maximum	27500 V	—
Long-term average total anode current maximum	1000 uA	—
Focus-electrode voltage maximum	6000 V	—
Grid2 peak voltage maximum	1000 V	—
Grid1 negative bias maximum	-400 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1 negative cutoff maximum	-200 V	—
Grid1 positive peak maximum	2 V	—
Typical anode voltage	25000 V	—
Typical focus-electrode voltage range	4200 to 5000 V	—
Typical grid2 voltage range	285 to 685 V	—
Typical grid1 cutoff range	-95 to -190 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1 capacitance per gun	6 pF	—
All-cathodes capacitance	15 pF	—
Grid3 capacitance	6.5 pF	—
External coating capacitance minimum	2000 pF	—
External coating capacitance maximum	2500 pF	—