CATHODE RAY

THE 16XP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

UNIPOTENTIAL CATHODE
MAGNETIC FOCUS & DEFLECTION
EXTERNAL DOUBLE FIELD ION TRAP

GREY FILTER FACEPLATE
10 1/8" X 13 1/2" MASTER SIZE
RECTANGULAR GLASS CONSTRUCTION

ELECTRICAL DATA

FOCUSBING METHOD
DEFOCUSBING METHOD
DEFLECTION ANGLE (APPROX.):
HORIZONTAL
VERTICAL
DIAGONAL

65
50
70

DEGREES
DEGREES
DEGREES

MAGNETIC
MAGNETIC

OPTICAL DATA

PHOSPHOR NUMBER
FLUORESCENT COLOR
PHOSPHORESCENT COLOR
PERSISTENCE
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.)

NO. 4
WHITE
WHITE
MEDIUM
PERCENT

MECHANICAL DATA

OVERALL LENGTH
GREATEST DIMENSIONS OF BULB:
DIAGONAL
WIDTH
HEIGHT
MINIMUM USEFUL SCREEN DIMENSIONS:
DIAGONAL
WIDTH
HEIGHT
BULB CONTACT
BASE
BASING
BULB CONTACT ALIGNMENT

18 3/4 ± 3/8
16 1/8
14 3/4
11 1/2
15
13 19/32
10 3/16
RECESSED SMALL CAVITY CAP
SMALL SHELL DUODECAL 5 PIN
40

J1-21
CONTENTS BETWEEN PIN POSITIONS #6 & 7 ± 10 DEGREES

PIN CONNECTIONS

PIN 1 - HEATER
PIN 2 - GRID NO. 1
PIN 10 - GRID NO. 2

PIN 11 - CATHODE
PIN 12 - HEATER
ANODE CAP

BOTTOM VIEW

CONTINUED ON FOLLOWING PAGE
RATINGS
DESIGN CENTER VALUES

HEATER VOLTAGE 6.3 Volts
HEATER CURRENT 0.6 Amp.
MAXIMUM DC ANODE VOLTAGE 15,000 Volts
MAXIMUM DC GRID #2 VOLTAGE 410 Volts
MAXIMUM GRID #1 VOLTAGE:
DC NEGATIVE-BIAS VALUE 125 Volts
DC POSITIVE-BIAS VALUE 0 Volts
POSITIVE-PEAK VALUE 2 Volts
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
DURING WARM-UP PERIOD NOT TO EXCEED 15 SECONDS 410 Volts
AFTER EQUIPMENT WARM-UP PERIOD 125 Volts
HEATER POSITIVE WITH RESPECT TO CATHODE 125 Volts

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE 12,000 Volts
DC GRID #2 VOLTAGE 250 Volts
DC GRID #1 VOLTAGE -27 to -63 Volts
DC FOCUSING COIL CURRENT (APPROX.) 100 MA.
DC ION TRAP CURRENT STANDARD COIL #108 (APPROX.) 120 MA.

A. VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

B. FOR STANDARD FOCUS COIL #109, OR EQUIVALENT, WITH THE COMBINED GRID #1 BIAS VOLTAGE AND VIDEO SIGNAL VOLTAGE ADJUSTED TO PRODUCE A HIGHLIGHT BRIGHTNESS OF 20 FOOT LAMBERTS ON A 10 1/8" BY 13 1/2" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS COIL SHALL BE 3 INCHES.

CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE 1.5 MEGOHMS